

**ATTACHMENT 2**

Hazardous Waste Inspection Report  
Generators - Part A

TSD

3/26/90

9:00 AM

Date of inspection \_\_\_\_\_ Time start \_\_\_\_\_ Time finish 12:00 PMName of inspector James DavisCompany, installation name Sun Refining and Market Co., Inc.Location Delaware Ave. and Green St., Marcus HookCounty Delaware Municipality Borough of Marcus HookIdentification number PAD980550594Name of responsible official Steve MartiniTitle Environmental ManagerMailing address P.O. Box 426, Marcus Hook, PA 19061

Area code and telephone number \_\_\_\_\_

Name of person interviewed Richard WareTitle Senior Environmental ConsultantMailing address (if different from above) sameArea code and telephone number (215) 447-1128

## 1. Current waste handling method:

- |    |  |  |  |  |   |
|----|--|--|--|--|---|
| a. | <input checked="" type="checkbox"/> On-site  | <input checked="" type="checkbox"/> treatment, | <input checked="" type="checkbox"/> storage, | <input type="checkbox"/> disposal            | <input type="checkbox"/> PBR                |
| b. | <input checked="" type="checkbox"/> On-site  | <input type="checkbox"/> use,                  | <input type="checkbox"/> reuse,              | <input checked="" type="checkbox"/> recycle, | <input checked="" type="checkbox"/> reclaim |
| c. | <input checked="" type="checkbox"/> Off-site | <input type="checkbox"/> treatment,            | <input type="checkbox"/> storage,            | <input checked="" type="checkbox"/> disposal |   |
| d. | <input type="checkbox"/> Off-site            | <input type="checkbox"/> use,                  | <input type="checkbox"/> reuse,              | <input type="checkbox"/> recycle,            | <input type="checkbox"/> reclaim            |

## 2. Amount of hazardous waste produced:

- |    |                   |         |                  |
|----|-------------------|---------|------------------|
| a. | <u>~24,924</u>    | kg./mo. | <u>ave. 1989</u> |
| b. | <u>~2,990,899</u> | kg./yr. | <u>1989</u>      |

## 3. Types of hazardous waste produced by Hazardous Waste Number and destination facility (include location and type).

Waste Number	Destination Facility	Location and Type
D001	Safety - Kleen	West Chester, PA
"	Waste Conversions	Hatfield, PA
D002	Merichem	Houston, TX
D007	Waste Conversions	Hatfield, PA
F002	Safety - Kleen	West Chester, PA
K051	Environmental Services of OH	Oregon, OH



Hazardous Waste Inspection Report  
TSD Facilities - Part A

Date of inspection 3/26/90 Time start 9:00 AM Time finish 12:00 PM  
Name of inspector James A. Davis  
Company, installation name Sun Refining and Marketing Co., Inc.  
Location Delaware Ave. and Green St., Marcus Hook  
County Delaware Municipality Borough of Marcus Hook  
Identification number PAD 980550594  
Name of responsible official Steve Martini  
Title Environmental Manager  
Mailing address P.O. Box 426, Marcus Hook, PA 19061  
Area code and telephone number \_\_\_\_\_  
Name of person interviewed Richard Ware  
Title Senior Environmental Consultant  
Mailing address (if different from above) same  
Area code and telephone number (215) 447-1178

## 1. Site characterization:

- |    |   |  |   |   |  |
|----|---|--|---|---|--|
| a. | <input type="checkbox"/> Treatment          | <input type="checkbox"/> surface impoundments  | <input type="checkbox"/> chemical         | <input type="checkbox"/> physical             | <input type="checkbox"/> biological        |
| b. | <input checked="" type="checkbox"/> Storage | <input checked="" type="checkbox"/> containers | <input checked="" type="checkbox"/> tanks | <input type="checkbox"/> surface impoundments | <input type="checkbox"/> waste piles       |
| c. | <input type="checkbox"/> Disposal           | <input type="checkbox"/> land treatment        | <input type="checkbox"/> landfill         | <input type="checkbox"/> incineration         | <input type="checkbox"/> thermal treatment |
| d. | <input type="checkbox"/> Use                | <input type="checkbox"/> reuse                 | <input type="checkbox"/> recycle          | <input type="checkbox"/> reclaim              |  |

2. Does the facility generate hazardous wastes? ☒ Yes ☐ No3. Types of hazardous waste produced by Hazardous Waste Number: D001, D002, D007  
F002, K0514. Are hazardous wastes transported off-site by the facility? ☐ Yes ☐ No

Hazardous Waste Inspection Report  
TSD Facilities — Part B

1—No Violation Observed				2—Not Applicable	3—Not Determined	4—Non-Compliance	
Status				R E Q U I R E M E N T			Chapter Citation
1	2	3	4				75.265
X				Part A permit application submitted.			(a)(2), (z)(2)
X				Identification number.			(b)
X				Wastes accepted at facility transported by haulers licensed to transport hazardous waste by the Department.			(b)(1)
		X		Waste streams not covered by permit approved by the Department before acceptance.			(c)(1)
X				Chemical and physical analyses repeated as required.			(c)(1)
X				All waste shipments inspected and sampled.			(c)(2)
X				Waste analysis plan on-site.			(c)(3)
X				24 hr. surveillance at active portion.			(d)(2)(i)
X				Artificial barrier at active portion.			(d)(2)(ii)
X				Proper signs posted and legible at a distance of at least 25 ft.			(d)(3)
X				Inspection schedule on-site.			(e)(2)
X				Maintenance schedule on-site for equipment or structures which reveal deterioration or malfunction.			(e)(4)
	X			Immediate remedial action taken where a hazard is imminent or has already occurred.			(e)(4)
X				On the job or classroom personnel training program.			(f)
X				Records retained for each employee at facility of training, job title, and job description.			(f)(6), (7)
X				Ignitable or reactive wastes separated from source of ignition or reaction.			(g)(1)
X				No smoking signs displayed where there are hazards from ignitable or reactive wastes.			(g)(1)
X				Treatment, storage, disposal of ignitable or reactive wastes or mixing of incompatible wastes or materials conducted according to requirements.			(g)(2)
X				Facility maintained/operated to minimize possibility of fire, explosion, or discharge of hazardous waste or hazardous constituents.			(h)(1)
X				Facility equipped with internal alarm system capable of providing immediate emergency instruction to personnel.			(h)(2)(i)
X				Facility equipped with a device for summoning outside emergency assistance.			(h)(2)(ii)
X				Facility equipped with fire control, spill control, and decontamination equipment.			(h)(2)(iii)
X				Facility equipped with water at adequate volume and pressure to supply fire control equipment.			(h)(2)(iv)
		X		Facility communications or alarm systems, fire control, spill control, and decontamination equipment tested and maintained.			(h)(3)
X				Adequate aisle space maintained to allow unobstructed movement of personnel and equipment during emergencies.			(h)(6)
X				Contingency plan on-site and implemented.			(i)(1)
X				Contingency plan describes action taken by personnel in the event of an emergency.			(i)(3)

**Hazardous Waste Inspection Report  
TSD Facilities — Part B (Continued)**

1—No Violation Observed				2—Not Applicable	3—Not Determined	4—Non-Compliance	
Status				R E Q U I R E M E N T			Chapter Citation
1	2	3	4				75.265
X				Contingency plan describes arrangements agreed to for outside emergency services such as police and fire department, hospitals, contractors, etc.			(i)(5)
X				Contingency plan contains an up-to-date list of names, addresses and phone numbers of all persons qualified to act as emergency coordinator.			(i)(6)
X				Contingency plan contains list of emergency equipment including location, physical description and capabilities of each item.			(i)(7)
X				Contingency plan contains an evacuation plan if there is a possibility that evacuation could be necessary.			(i)(8)
X				One employee designated as the primary emergency coordinator either on the premises or on call.			(i)(11)
X				Facility accepting only PA manifests.			(j)
X				Manifest properly completed and routed within time limits (24 hrs.)			(j)(2), (3)
X				Manifest discrepancies resolved or reported within time limits.			(j)(10), (11)
X				Written operating record maintained on the premises.			(k)
X				Written operating record contains description and quantity of wastes and method of treatment, storage or disposal.			(k)(2)(i)
	X			Written operating record contains location and quantity of each hazardous waste.			(k)(2)(ii)
X				Written operating record contains results of waste analyses and treatability tests.			(k)(2)(iii)
X				Written operating record contains reports and details of all incidents.			(k)(2)(iv)
X				Written operating record contains records and results of all inspections.			(k)(2)(v)
X				Written operating record contains required monitoring, testing, and analytical data.			(k)(2)(vi)
X				Written operating record contains closure and post-closure cost estimates			(k)(2)(vii)
X				All records retained on premises and available for inspection.			(l)
X				Quarterly reports submitted to the Department.			(m)
	X			Emissions, discharges, fires, explosions, and groundwater contamination reported as required.			(m)(2)
	X			Groundwater monitoring wells located at approved sites.			(n)(2)
	X			Adequate protection groundwater monitoring wells.			(n)(7)
	X			Groundwater sampling and analysis plan on the premises.			(n)(8)
	X			Groundwater quality assessment and abatement outline on the premises.			(n)(14)
X				Closure plan on the premises and up-to-date.			(o)(2)—(9)
	X			Post-closure plan on the premises and up-to-date.			(o)(10)—(19)
X				Annual closure cost estimate on the premises and up-to-date.			(p)(2)—(4)
	X			Annual post-closure cost estimate on the premises and up-to-date.			(p)(5)—(7)

## Hazardous Waste Inspection Report TSD Facilities — Storage (Containers)

1—No Violation Observed				2—Not Applicable				3—Not Determined				4—Non-Compliance					
Status				R E Q U I R E M E N T												Chapter Citation	
1	2	3	4													75.265	
				Containers managed to prevent leaks and spills.												(q)(1), (4)	
				Containers are compatible with waste stored.												(q)(2)	
				Containers are closed during storage.												(q)(3)	
				Container storage area inspected weekly for leaks, deterioration, etc.												(q)(5)	
				Containers holding ignitable or reactive wastes are set back 15 m (50 ft) from property line.												(q)(6)	
				Satisfactory procedures followed for handling incompatible wastes.												(q)(7), (8)	
				Incompatible wastes separated or protected from other materials.												(q)(9)	
				Containers accumulation areas have containment system capable of collecting and holding spills, leaks, and precipitation.												(q)(10)	
				Containment system has impervious base free of cracks.												(q)(10)(i)	
				Efficient drainage provided from base to sump or collection system.												(q)(10)(ii)	
				Containment sufficient to contain volume of largest container or 10% of total volume of all containers, whichever is greater.												(q)(10)(iii)	
				Run-on into containment system prevented.												(q)(11)	
				Spilled or leaked waste and accumulated precipitation removed from sump or collection system with sufficient frequency to prevent overflow.												(q)(12)	
				At closure, all hazardous wastes and hazardous waste residues removed. Remaining containers, liners, bases, and soil decontaminated or removed.												(q)(13)	
				Indoor accumulation of reactive or ignitable waste with less than 20% solids meets height and configuration criteria ( $\leq 6$ feet high, 8 ft x 8 ft., 5-foot surrounding aisle space).												(q)(14)(i)	
				Outdoor accumulation of reactive waste with less than 20% solids meets height and configuration criteria ( $\leq 9$ feet high, 16 ft x 16 ft, 5-foot aisle surrounding group, 12 ft access way).												(q)(14)(ii)	
				Minimum setback of 40 feet maintained for outdoor container accumulation of ignitable or reactive wastes.												(q)(14)(ii)	
				Accumulation of nonreactive or nonignitable hazardous waste meets height and configuration criteria ( $\leq 9$ feet high).												(q)(14)(iii)	
				Containers labeled to accurately identify hazardous waste contained.												Act 97 Section 403(b)(2)	

Drum storage area is not in use.

Hazardous Waste Inspection Report  
TSD Facilities — Storage (Tanks)

1—No Violation Observed				2—Not Applicable				3—Not Determined				4—Non-Compliance			
Status				REQUIREMENT								Chapter Citation			
1	2	3	4									75.265			
X				Precautions taken for tanks holding ignitable, reactive, or incompatible waste or material.								(r)(2)			
X				Tanks managed to prevent leaks, rupture, corrosion, or otherwise failing.								(r)(3)			
	X			Uncovered tanks operated to ensure at least 60 cm (2 ft) of freeboard.								(r)(4)			
	X			Uncovered tanks equipped with an overflow alarm and an overflow device to a standby tank with a capacity equal to or exceeding the freeboard requirement.								(r)(4)			
		X		Continuously fed tanks equipped with a means to stop the inflow.								(r)(5)			
X				Containment structure with a capacity that equals or exceeds the largest above ground tank volume plus a reasonable allowance for precipitation based on local weather conditions and plant operations provided for liquid storage in above ground or partially above ground tanks.								(r)(6)			
X				Monitoring equipment data inspected once each operating day.								(r)(8)(ii)			
X				Liquid level of tanks inspected once each operating day.								(r)(8)(iii)			
X				Construction materials of tanks inspected weekly.								(r)(8)(iv)			
X				Construction materials of discharge confinement structures and area immediately surrounding inspected weekly.								(r)(8)(v)			
	X			All hazardous waste removed from tanks and related appurtenances at closure.								(r)(9)			
				Placement of ignitable or reactive waste only with the Department's approval.								(r)(10)			
	X			Covered tanks in which ignitable or reactive waste is treated or stored meets NEPA buffer zone requirements.								(r)(11)			
X				Precautions taken for handling ignitable, reactive or incompatible waste or materials.								(r)(12), (13)			
X				Waste analyses and/or trial tests conducted on hazardous wastes substantially different from wastes previously treated or stored; or chemically treat hazardous waste with a substantially different process than any previously used in that tank.								(r)(7)			
X				Discharge control equipment inspected once each operating day.								(r)(8)(i)			
X				Tanks labeled to accurately identify hazardous waste contained.								Act 97 Section 403(b)(2)			



Commonwealth of Pennsylvania  
Department of Environmental Resources  
Bureau of Waste Management

## Inspection Report Comments

Date of Inspection 3/26/90 Identification Number PAD980550594Company/Facility/Site Name Sun Refining and Marketing Co., Inc.

An inspection was conducted on March 26, 1990. There were no violations observed during this inspection. I was not able to observe all the records this day, due to Mr Ware had to catch a flight. So, I returned on April 6, 1990 to finish up looking at records, etc.. There were no violations observed either March 26<sup>th</sup>, or April 6<sup>th</sup>.

*In the "Requirement" Section of this inspection report, each listed inspection item may provide only a brief version of its corresponding obligation as described in the body of the regulations. Please use the Chapter citations listed on this inspection report as a reference to obtain a detailed description of compliance requirements.*

*This inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Waste Management, inspected the above installation. The findings of this inspection are shown in this report. This inspection report shall serve a formal notification of any violations which were observed during the inspection. Violations may also be discovered upon examination of the results of laboratory analyses and review of Department records. Additional notification may be forthcoming, concerning any violations indicated herein and listing any additional violations.*

*This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.*

*Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.*

Person Interviewed (signature) \_\_\_\_\_ Date \_\_\_\_\_

Inspector (signature) James Davis Date 4/9/90Page 8 of 8

55A

GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

I. Your EPA I.D. No. PIA101910151510151914  
 TSD Facility's EPA I.D. No. PIA10101010171318181919  
 TSD Facility's Name SAFETY KLEEN CORP  
 Address 1142 Green Hill Road WEST CHESTER, PA 19380

III. WASTE SHIPPED OFF-SITE

A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	Part X in Box	D. PA. Hazardous Waste Transporter License No.
US DOT Description- WASTE PETROLEUM NAPHTHA COMBUSTIBLE LIQUID UN 1255 (EPA 2001) State Manifest Document Number - PAB 5364085	D 0 0 1	267	K P T M	A H 0 1 7 2
US Description- SAME State Manifest Document Number - PAB 5332353	D 0 0 1	80	K P T M	A H 0 1 7 2
US DOT Description- SAME State Manifest Document Number - PAB 5365706	D 0 0 1	1005	K P T M	A H 0 1 7 2
US DOT Description- SAME State Manifest Document Number - PAB 5294472	D 0 0 1	525	K P T M	A H 0 1 7 2
US DOT Description- SAME State Manifest Document Number - PAB 5327851	D 0 0 1	1165	K P T M	A H 0 1 7 2
US Description- SAME State Manifest Document Number - PAB 5311051	D 0 0 1	160	K P T M	A H 0 1 7 2
US DOT Description- SAME State Manifest Document Number - PAB 5613226	D 0 0 1	792	K P T M	A H 0 1 7 2
US DOT Description- SAME State Manifest Document Number - PAB 5598644	D 0 0 1	985	K P T M	A H 0 1 7 2
US DOT Description- WASTE COMPOUND CLEANING LIQUID CORROSIVE MAT'L NA1760 (EPA 2002) State Manifest Document Number -	F 0 0 2	45	K P T M	A H 0 1 7 2
US DOT Description- State Manifest Document Number -			K P T M	A H

Comments:

552 ✓ = 2.5 Tons

55A

GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

I. Your EPA I.D. No. AA10191810151510151917  
II. TSD Facility's EPA I.D. No. 01AD10141512141317106  
TSD Facility's Name ESOT (Fondessy)  
Address 876 Otter Creek Road Oregon, Ohio 43616-7571

III. WASTE SHIPPED OFF-SITE

A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	Put "X" in Box	D. PA. Hazardous Waste Transporter License No.
US DOT Description- <u>HAZARDOUS WASTE SOLID, n.o.s</u> <u>NA9189 EQ (API SEPARATOR SLUDGE)</u> State Manifest Document Number - <u>PA35272621</u>	<u>K10151</u>	<u>20.6</u>	<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH0192</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>
US DOT Description- State Manifest Document Number -			<u>K</u> <u>P</u> <u>T</u> <u>M</u>	<u>AH</u>

Comments:

## GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

Your EPA I.D. No.

PAD980550594

TSD Facility's EPA I.D. No.

OH045243706

TSD Facility's Name

Fadessy Enterprises, Inc / ACES

Address

876 OTTER Creek Road Oregon, Ohio 43066

## III. WASTE SHIPPED OFF-SITE

LINE NO.	A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	Put "X" in Box	D. PA. Hazardous Waste Transporter License No.
1	US DOT Description- Hazardous Waste, Solid, n.e.s., (Heat Exchanger Sludge) NA9189 RQ State Manifest Document Number - PAB4731311	K050	21	K P <input checked="" type="checkbox"/> M	AH0192
2	US DOT Description- SAME State Manifest Document Number - PAB4731300	K050	20	K P <input checked="" type="checkbox"/> M	AH0192
3	US DOT Description- State Manifest Document Number -			K P T M	AH
4	US DOT Description- State Manifest Document Number -			K P T M	AH
5	US DOT Description- State Manifest Document Number -			K P T M	AH
6	US DOT Description- State Manifest Document Number -			K P T M	AH
7	US DOT Description- State Manifest Document Number -			K P T M	AH
8	US DOT Description- State Manifest Document Number -			K P T M	AH
9	US DOT Description- State Manifest Document Number -			K P T M	AH
10	US DOT Description- State Manifest Document Number -			K P T M	AH

E. Comments:

55A

GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

I Your EPA I.D. No. 2A2980550594

II. TSD Facility's EPA I.D. No. TXD0008106999

TSD Facility's Name MERICHEM

Address 1914 Haden Road Houston, Texas 77015-6498

III. WASTE SHIPPED OFF-SITE

LINE NO.	A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	Put X in Box	D. PA. Hazardous Waste Transporter License No.
1	US DOT Description- Sodium Hydroxide Solution (Contains Cresylates), n.o.s., Corrosive, UN 1824, R9 State Manifest Document Number - PAC 1278023	0002	1067	K P T M	AH0112
2	DOT Description- State Manifest Document Number -			K P T M	AH
3	US DOT Description- State Manifest Document Number -			K P T M	AH
4	US DOT Description- State Manifest Document Number -			K P T M	AH
5	US DOT Description- State Manifest Document Number -			K P T M	AH
6	DOT Description- State Manifest Document Number -			K P T M	AH
7	US DOT Description- State Manifest Document Number -			K P T M	AH
8	US DOT Description- State Manifest Document Number -			K P T M	AH
9	US DOT Description- State Manifest Document Number -			K P T M	AH
10	US DOT Description- State Manifest Document Number -			K P T M	AH

E. Comments:

55A

GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

Your EPA I.D. No. PA D 9 8 0 5 5 8 5 9 4

II. TSD Facility's EPA I.D. No. PA D 0 8 5 6 9 0 5 9 2

TSD Facility's Name Waste Conversion Inc

Address 2869 Sandstone Drive Hatfield, Pa 19440

III. WASTE SHIPPED OFF-SITE

LINE NO.	A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	P T M X in Box	D. PA. Hazardous Waste Transporter License No.
1	US DOT Description- RQ Waste Sodium Dichromate, Oem-A, NA 1479 State Manifest Document Number - PAC 1001431	D 0 0 7	1720	K P T M	A H 0 1 3 9
2	US DOT Description- State Manifest Document Number -			K P T M	A H
3	US DOT Description- State Manifest Document Number -			K P T M	A H
4	US DOT Description- State Manifest Document Number -			K P T M	A H
5	US DOT Description- State Manifest Document Number -			K P T M	A H
6	US DOT Description- State Manifest Document Number -			K P T M	A H
7	US DOT Description- State Manifest Document Number -			K P T M	A H
8	US DOT Description- State Manifest Document Number -			K P T M	A H
9	US DOT Description- State Manifest Document Number -			K P T M	A H
0	US DOT Description- State Manifest Document Number -			K P T M	A H

E. Comments:



Sun Refining and  
Marketing Company  
P.O. Box 426  
Marcus Hook PA 19061-0426

April 10, 1989

Pennsylvania Department of Environmental Resources  
Division of Hazardous Waste Management  
P.O. Box 2063  
Harrisburg, PA 17120

Dear Sir:

Enclosed is the Pennsylvania Quarterly Hazardous Waste Report for the Sun Refining and Marketing Company's Marcus Hook Refinery. This report is filed pursuant to Sections 75.262 (i) and 75.265 (m) of the Pennsylvania Code and covers the period January 1, 1989 to March 31, 1989.

Sincerely,  
SUN REFINING AND MARKETING COMPANY

A handwritten signature in black ink, appearing to read "Richard E. Ware".

Richard E. Ware  
Environmental Engineering

REW:erh  
Enclosure  
cc: S. C. Martini  
REW-PA10

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WASTE MANAGEMENT  
P.O. Box 2063  
Harrisburg, PA 17120

55

QUARTERLY HAZARDOUS WASTE REPORT — GENERAL INFORMATION

I. This report is for the quarter ending (check one):

- ☒ March 31  
☐ June 30  
☐ September 30  
☐ December 31

19 89  
Yr.

II. Your EPA I.D. Number

P	A	D	9	8	0	5	5	0	5	9	4
---	---	---	---	---	---	---	---	---	---	---	---

III. ☐ Check this block, if there is nothing to report this quarter.

IV. Name of Installation Sun Refining and Marketing Company - Marcus Hook Refinery

V. Mailing Address P.O. Box 426 - Marcus Hook, PA 19061

VI. Location Address Delaware Avenue and Green Streets

Marcus Hook, PA 19061

- ☐ City  
☒ Borough  
☐ Township

If within PA, Marcus Hook Delaware County  
(Name of Municipality) (Check one)

VII. Contact Person Stephen C. Martini OK SOLY

Phone No. 215 - 447 - 1176  
(Area Code)

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Malcolm E. Flint  
Refinery Manager

A. Print or Type Name

Malcolm E. Flint  
B. Signature of Authorized Representative

4/17/89

C. Date Signed





**Sun Refining and  
Marketing Company**  
P O Box 426  
Marcus Hook PA 19061-0426

January 9, 1990

Pennsylvania Department of Environmental Resources  
Division of Hazardous Waste Management  
P.O. Box 2063  
Harrisburg, PA 17120

Dear Sir:

Enclosed is the Pennsylvania Quarterly Hazardous Waste Report for the Sun Refining and Marketing Company's Marcus Hook Refinery. This report is filed pursuant to Sections 75.262 (i) and 75.265 (m) of the Pennsylvania Code and covers the period ending December, 1989.

Sincerely,  
SUN REFINING AND MARKETING COMPANY

A handwritten signature in cursive script that reads "Richard E. Ware (SCM)".

Richard E. Ware  
Environmental Engineering

REW:erg  
Enclosure  
REW-PA10

Page 2

bcc: S. C. Martini *OK SCH 1/12/90*  
File: Hazardous Waste Quarterly Reports

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WASTE MANAGEMENT  
P.O. Box 2063  
Harrisburg, PA 17120

55

QUARTERLY HAZARDOUS WASTE REPORT — GENERAL INFORMATION

I. This report is for the quarter ending (check one):

- ☐ March 31  
☐ June 30  
☐ September 30  
☒ December 31
- 19 89  
Yr.

II. Your EPA I.D. Number

P	A	D	9	8	0	5	5	0	5	9	4
---	---	---	---	---	---	---	---	---	---	---	---

III. ☐ Check this block, if there is nothing to report this quarter.

IV. Name of Installation Sun Refining and Marketing Company - Marcus Hook Refinery

Mailing Address P.O. Box 426

Marcus Hook, PA 19061

VI. Location Address Delaware Avenue & Green Streets

Marcus Hook, PA 19061

If within PA, Marcus Hook  
(Name of Municipality)

- ☐ City  
☒ Borough  
☐ Township

Delaware County

VII. Contact Person Richard E. Ware

Phone No. 215 - 447 - 1178  
(Area Code)

VIII. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

John A. Rossi  
Refinery Manager

A. Print or Type Name

  
B. Signature of Authorized Representative

1/19/90  
C. Date Signed

55A

GENERATOR QUARTERLY HAZARDOUS WASTE REPORT

I Your EPA I.D. No. P A D 9 8 0 5 5 0 5 9 4

II. TSD Facility's EPA I.D. No. P A D 0 0 0 7 3 8 8 4 9

TSD Facility's Name SAFETY KLEEN Corp

Address 1142 Green Hill Road West Chester, Pa 19380

III. WASTE SHIPPED OFF-SITE

LINE NO.	A. US DOT Proper Shipping Name of Waste and State Manifest Document Number (include State Abbreviation)	B. Hazardous Waste Number	C. Weight of Shipment and Unit of Measure (P-pounds, T-ton, K-kilograms, M-metric ton) DO NOT ENTER GALLONS	Put "X" in Box	D. PA. Hazardous Waste Transporter License No.
1	US DOT Description- WASTE PETROLEUM NAPHTHA, COMBUSTIBLE LIQUID, UN 1255 (EPA D001) State Manifest Document Number - PAC 0703244	D 0 0 1	1810	K P T M	A H 0 1 7 2
2	DOT Description- SAME AS 1. State Manifest Document Number - PAC 0785584	D 0 0 1	258	K P T M	A H 0 1 7 2
3	US DOT Description- SAME AS 1. State Manifest Document Number - PAC 0738242	D 0 0 1	1534	K P T M	A H 0 1 7 2
4	US DOT Description- WASTE COMPOUND CLEANING LIQUID, CORROSIVE MATERIAL NA1760 (EPA F002) State Manifest Document Number - PAC 0738242	F 0 0 2	45	K P T M	A H 0 1 7 2
5	US DOT Description- SAME AS 1. State Manifest Document Number - PAC 0795266	D 0 0 1	344	K P T M	A H 0 1 7 2
6	DOT Description- SAME AS 1. State Manifest Document Number - PAC 0676524	D 0 0 1	1601	K P T M	A H 0 1 7 2
7	US DOT Description- SAME AS 1. State Manifest Document Number - PAC 0706064	D 0 0 1	172	K P T M	A H 0 1 7 2
8	US DOT Description- State Manifest Document Number -			K P T M	A H
9	US DOT Description- State Manifest Document Number -			K P T M	A H
10	US DOT Description- State Manifest Document Number -			K P T M	A H

E. Comments:

5767 = 2.9760



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Bureau of Waste Management  
P. O. Box 2063  
Harrisburg, PA 17120

Please print or type. (Form designed for use on elite 412-pitch) typewriter.)  
Form Approved. OMB No. 2050-0039 Expires 9-30-88

ER-SWM-51:REV. 10/86

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>PAD980550594</b>		2. Page 1 of 1		Information in the shaded areas is not required by Federal law but is required by State law.	
3. Generator's Name and Mailing Address <b>Sun Refining and Marketing Company P.O. Box 426, Marcus Hook, PA 19061</b>				A. State Manifest Document Number <b>PAB 4731311</b>			
4. Generator's Phone ( <b>215</b> ) <b>447-1178</b>				B. State Gen. ID <b>PAD 980 550 594</b>			
5. Transporter 1 Company Name <b>Snow Environmental Services</b>		6. US EPA ID Number <b>PAD020070301</b>		C. State Trans. ID <b>PA-AH 0192</b>			
7. Transporter 2 Company Name <b>N/A</b>		8. US EPA ID Number <b>N/A</b>		D. Transporter's Phone ( <b>215</b> ) <b>667-4968</b>		E. State Trans. ID <b>PA-AH</b>	
9. Designated Facility Name and Site Address <b>Environmental Services of Ohio (ESOI) 876 Otter Creek Road Oregon, Ohio 43616-7571</b>				10. US EPA ID Number <b>OH.D045243705</b>		F. Transporter's Phone ( )	
				G. State Facility's ID <b>Not Required</b>		H. Facility's Phone ( <b>419</b> ) <b>726-1521</b>	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers		13. Total Quantity	
				No. Type		Unit Wt/Vol	
a. <b>Hazardous Waste, Solid, NOS (Heat Exchanger Sludge) NA 9189 RQ</b>				<b>001 DT</b>		<b>43.040 P</b>	
b.						<b>3940 P</b>	
c.						<b>21.47 T</b>	
d.							
J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)				K. Handling Codes for Wastes Listed Above			
Haz. Code Physical State		Haz. Code Physical State		a. <b>SI-DS1</b>			
a. <b>U1 S</b>		c. <b>U1 S</b>		b.			
b. <b>U1 S</b>		d. <b>U1 S</b>		d.			
15. Special Handling Instructions and Additional Information <b>Fondessy ID #PCN-0236K</b>							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name <b>Richard E. Ware</b>				Signature <i>[Signature]</i>		Month Day Year <b>03/16/88</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature <i>[Signature]</i>		Month Day Year <b>03/16/88</b>	
Printed/Typed Name <b>Allen L Detwiler</b>				Signature <i>[Signature]</i>		Month Day Year <b>03/16/88</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature		Month Day Year	
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name <b>JERRY PELLE</b>				Signature <i>[Signature]</i>		Month Day Year <b>03/17/88</b>	



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES  
Bureau of Waste Management  
P. O. Box 8550  
Harrisburg, PA 17105-8550

FOR SHIPMENT OF HAZARDOUS, INFECTIOUS  
AND CHEMOTHERAPEUTIC WASTE.

Form approved.  
OMB No. 2050-0039  
Expires 9-30-91

ER-WM-51 REV. 11/89

2-139-03

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DER (717) 787-4343

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law but is required by State law.	
3. Generator's Name and Mailing Address SUN OIL CO ZONE 5 SHOP MARTIN'S HOOK (PA) 19061 BLUE BALL AVE PA 19061		4. Generator's Phone (215) 447-1989		A. State Manifest Document Number PAC 1947691		
5. Transporter 1 Company Name SAFETY-KLEEN CORP.		6. US EPA ID Number ILD 051060403		C. State Trans. ID PA- [AH] 0172		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (215) 436-5848		
9. Designated Facility Name and Site Address SAFETY-KLEEN CORP. 1142 GREEN HILL ROAD WESTCHESTER, PA 19380		10. US EPA ID Number 2-139-03 PAO 000738643		E. State Trans. ID PA- [ ] [ ] [ ] [ ]		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) a. WASTE PETROLEUM NAPHTHA COMBUSTIBLE LIQUID UN1255 (0001) (EPC #27)		12. Containers No. Type 12 (H) 01082		13. Total Quantity 01082		14. Unit P
b. NOTICE: IN ACCORDANCE WITH 40 CFR 268.7 THE GENERATOR CERTIFIES THAT THE WASTE DESCRIBED AS "WASTE PETROLEUM NAPHTHA" IS A RESTRICTED WASTE. THE WASTE CONTAINS THE FOLLOWING CONSTITUENTS IN EXCESS OF THE TREATMENT STANDARDS ARE NOTED: TOTAL HALOGENATED ORGANIC COMPOUNDS (1000 MG/L).		c.		d.		e.
J. Additional Descriptions for Materials Listed Above Lab Pack Physical State a. [ ] [ ] b. [ ] [ ]		K. Handling Codes for Wastes Listed Above a. S02 c.		b.		d.
15. Special Handling Instructions and Additional Information EMERGENCY RESP# 1-800-368-4660 FOR RECYCLE IF UNDELIVERABLE, RETURN TO GENERATOR SP001 A: 501 B: 283376 7734 292095 1884 283402 9070 283073 1684 283375 7733 283072 1683 283374 7731 283099 1684 283373 7730 1729 1728 11/29/88 806						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.  Printed/Typed Name: [Signature] Signature: [Signature] MONTH DAY YEAR: 05/15/11						
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name: [Signature] Signature: [Signature] MONTH DAY YEAR: 05/15/11						
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name: [Signature] Signature: [Signature] MONTH DAY YEAR: [ ] [ ] [ ]						
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name: [Signature] Signature: [Signature] MONTH DAY YEAR: [ ] [ ] [ ]						

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>PAD 980550594</b>		Manifest Document No. <b>63778</b>		2. Page 1 of 1		Information in the shaded areas is not required by Federal law but is required by State law.							
		3. Generator's Name and Mailing Address <b>SUN OIL CO</b> <del>800 HICKORY STREET</del> <b>MARCUS HOOK</b> PA 19061 4. Generator's Phone ( <b>215</b> ) <b>485-1121</b>						A. State Manifest Document Number <b>PAC 1389411</b>							
5. Transporter 1 Company Name <b>SAFETY-KLEEN CORP.</b>						6. US EPA ID Number <b>ILD 051060408</b>		C. State Trans. ID <b>PA-   A H     0 1 7 2  </b>							
7. Transporter 2 Company Name						8. US EPA ID Number		D. Transporter's Phone ( <b>215</b> ) <b>436-5848</b>							
9. Designated Facility Name and Site Address <b>SAFETY-KLEEN CORP.</b> <b>1142 GREEN HILL ROAD</b> <b>WESTCHESTER, PA 19380</b>						10. US EPA ID Number <b>PAD 000738849</b>		E. State Trans. ID <b>PA-          </b>							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.			
a. <del>WASTE PETROLEUM NAPHTHA</del> <b>COMBUSTIBLE LIQUID UN1255(D001) (ERG #27)</b>						<b>018</b>		<b>DM</b>		<b>01507</b>		<b>P</b>		<b>D 0 0 1</b>	
b. <del>WASTE COMPOUND, CLEANING, LIQUID</del> <b>CORROSIVE MATERIAL NA1760(F002) (ERG#60)</b> <b>Carburizer Cleaner</b>						<b>001</b>		<b>DM</b>		<b>00045</b>		<b>P</b>		<b>F 0 0 2</b>	
c. <del>WASTE PETROLEUM NAPHTHA</del> <b>COMBUSTIBLE LIQUID UN1255(D001) (ERG #27)</b>						<b>001</b>		<b>DF</b>		<b>00027</b>		<b>P</b>		<b>D 0 0 1</b>	
NOTICE: IN ACCORDANCE WITH 40 CFR 263.7, THE GENERATOR PROVIDES NOTICE THAT THE WASTE DESCRIBED AS <del>WASTE PETROLEUM NAPHTHA</del> IS A RESTRICTED WASTE. THE WASTE CONTAINS THE FOLLOWING CONSTITUENTS WHOSE TREATMENT STANDARDS ARE NOTED: TOTAL HALOGENATED ORGANIC COMPOUNDS (1000 MG/L).															
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above									
Lab Pack		Physical State		Lab Pack		Physical State		a. <b>S02</b>		c. <b>S02</b>		b. <b>S01</b>		d.	
a. <input type="checkbox"/>		<input type="checkbox"/>		c. <input type="checkbox"/>		<input type="checkbox"/>									
b. <input type="checkbox"/>		<input type="checkbox"/>		d. <input type="checkbox"/>		<input type="checkbox"/>									
15. Special Handling Instructions and Additional Information						<b>9016 14752372 963778 2-139-03-7724 0101</b> <b>EMERGENCY RESP#1-708-868-4650 FOR RECYCLE</b> <b>IF UNDELIVERABLE, RETURN TO GENERATOR</b> <b>SKDOT# A: 501 B: 503 C: 501 D:</b> <b>963778 963777 963776 8108 9070 7735 963775 963774 963773 963772 963771 963770 963769 963768 963767 963766 963765 963764 963763 963762 963761 963760 963759 963758 963757 963756 963755 963754 963753 963752 963751 963750 963749 963748 963747 963746 963745 963744 963743 963742 963741 963740 963739 963738 963737 963736 963735 963734 963733 963732 963731 963730 963729 963728 963727 963726 963725 963724 963723 963722 963721 963720 963719 963718 963717 963716 963715 963714 963713 963712 963711 963710 963709 963708 963707 963706 963705 963704 963703 963702 963701 963700 963699 963698 963697 963696 963695 963694 963693 963692 963691 963690 963689 963688 963687 963686 963685 963684 963683 963682 963681 963680 963679 963678 963677 963676 963675 963674 963673 963672 963671 963670 963669 963668 963667 963666 963665 963664 963663 963662 963661 963660 963659 963658 963657 963656 963655 963654 963653 963652 963651 963650 963649 963648 963647 963646 963645 963644 963643 963642 963641 963640 963639 963638 963637 963636 963635 963634 963633 963632 963631 963630 963629 963628 963627 963626 963625 963624 963623 963622 963621 963620 963619 963618 963617 963616 963615 963614 963613 963612 963611 963610 963609 963608 963607 963606 963605 963604 963603 963602 963601 963600 963599 963598 963597 963596 963595 963594 963593 963592 963591 963590 963589 963588 963587 963586 963585 963584 963583 963582 963581 963580 963579 963578 963577 963576 963575 963574 963573 963572 963571 963570 963569 963568 963567 963566 963565 963564 963563 963562 963561 963560 963559 963558 963557 963556 963555 963554 963553 963552 963551 963550 963549 963548 963547 963546 963545 963544 963543 963542 963541 963540 963539 963538 963537 963536 963535 963534 963533 963532 963531 963530 963529 963528 963527 963526 963525 963524 963523 963522 963521 963520 963519 963518 963517 963516 963515 963514 963513 963512 963511 963510 963509 963508 963507 963506 963505 963504 963503 963502 963501 963500 963499 963498 963497 963496 963495 963494 963493 963492 963491 963490 963489 963488 963487 963486 963485 963484 963483 963482 963481 963480 963479 963478 963477 963476 963475 963474 963473 963472 963471 963470 963469 963468 963467 963466 963465 963464 963463 963462 963461 963460 963459 963458 963457 963456 963455 963454 963453 963452 963451 963450 963449 963448 963447 963446 963445 963444 963443 963442 963441 963440 963439 963438 963437 963436 963435 963434 963433 963432 963431 963430 963429 963428 963427 963426 963425 963424 963423 963422 963421 963420 963419 963418 963417 963416 963415 963414 963413 963412 963411 963410 963409 963408 963407 963406 963405 963404 963403 963402 963401 963400 963399 963398 963397 963396 963395 963394 963393 963392 963391 963390 963389 963388 963387 963386 963385 963384 963383 963382 963381 963380 963379 963378 963377 963376 963375 963374 963373 963372 963371 963370 963369 963368 963367 963366 963365 963364 963363 963362 963361 963360 963359 963358 963357 963356 963355 963354 963353 963352 963351 963350 963349 963348 963347 963346 963345 963344 963343 963342 963341 963340 963339 963338 963337 963336 963335 963334 963333 963332 963331 963330 963329 963328 963327 963326 963325 963324 963323 963322 963321 963320 963319 963318 963317 963316 963315 963314 963313 963312 963311 963310 963309 963308 963307 963306 963305 963304 963303 963302 963301 963300 963299 963298 963297 963296 963295 963294 963293 963292 963291 963290 963289 963288 963287 963286 963285 963284 963283 963282 963281 963280 963279 963278 963277 963276 963275 963274 963273 963272 963271 963270 963269 963268 963267 963266 963265 963264 963263 963262 963261 963260 963259 963258 963257 963256 963255 963254 963253 963252 963251 963250 963249 963248 963247 963246 963245 963244 963243 963242 963241 963240 963239 963238 963237 963236 963235 963234 963233 963232 963231 963230 963229 963228 963227 963226 963225 963224 963223 963222 963221 963220 963219 963218 963217 963216 963215 963214 963213 963212 963211 963210 963209 963208 963207 963206 963205 963204 963203 963202 963201 963200 963199 963198 963197 963196 963195 963194 963193 963192 963191 963190 963189 963188 963187 963186 963185 963184 963183 963182 963181 963180 963179 963178 963177 963176 963175 963174 963173 963172 963171 963170 963169 963168 963167 963166 963165 963164 963163 963162 963161 963160 963159 963158 963157 963156 963155 963154 963153 963152 963151 963150 963149 963148 963147 963146 963145 963144 963143 963142 963141 963140 963139 963138 963137 963136 963135 963134 963133 963132 963131 963130 963129 963128 963127 963126 963125 963124 963123 963122 963121 963120 963119 963118 963117 963116 963115 963114 963113 963112 963111 963110 963109 963108 963107 963106 963105 963104 963103 963102 963101 963100 963099 963098 963097 963096 963095 963094 963093 963092 963091 963090 963089 963088 963087 963086 963085 963084 963083 963082 963081 963080 963079 963078 963077 963076 963075 963074 963073 963072 963071 963070 963069 963068 963067 963066 963065 963064 963063 963062 963061 963060 963059 963058 963057 963056 963055 963054 963053 963052 963051 963050 963049 963048 963047 963046 963045 963044 963043 963042 963041 963040 963039 963038 963037 963036 963035 963034 963033 963032 963031 963030 963029 963028 963027 963026 963025 963024 963023 963022 963021 963020 963019 963018 963017 963016 963015 963014 963013 963012 963011 963010 963009 963008 963007 963006 963005 963004 963003 963002 963001 963000 962999 962998 962997 962996 962995 962994 962993 962992 962991 962990 962989 962988 962987 962986 962985 962984 962983 962982 962981 962980 962979 962978 962977 962976 962975 962974 962973 962972 962971 962970 962969 962968 962967 962966 962965 962964 962963 962962 962961 962960 962959 962958 962957 962956 962955 962954 962953 962952 962951 962950 962949 962948 962947 962946 962945 962944 962943 962942 962941 962940 962939 962938 962937 962936 962935 962934 962933 962932 962931 962930 962929 962928 962927 962926 962925 962924 962923 962922 962921 962920 962919 962918 962917 962916 962915 962914 962913 962912 962911 962910 962909 962908 962907 962906 962905 962904 962903 962902 962901 962900 962899 962898 962897 962896 962895 962894 962893 962892 962891 962890 962889 962888 962887 962886 962885 962884 962883 962882 962881 962880 962879 962878 962877 962876 962875 962874 962873 962872 962871 962870 962869 962868 962867 962866 962865 962864 962863 962862 962861 962860 962859 962858 962857 962856 962855 962854 962853 962852 962851 962850 962849 962848 962847 962846 962845 962844 962843 962842 962841 962840 962839 962838 962837 962836 962835 962834 962833 962832 962831 962830 962829 962828 962827 962826 962825 962824 962823 962822 962821 962820 962819 962818 962817 962816 962815 962814 962813 962812 962811 962810 962809 962808 962807 962806 962805 962804 962803 962802 962801 962800 962799 962798 962797 962796 962795 962794 962793 962792 962791 962790 962789 962788 962787 962786 962785 962784 962783 962782 962781 962780 962779 962778 962777 962776 962775 962774 962773 962772 962771 962770 962769 962768 962767 962766 962765 962764 962763 962762 962761 962760 962759 962758 962757 962756 962755 962754 962753 962752 962751 962750 962749 962748 962747 962746 962745 962744 962743 962742 962741 962740 962739 962738 962737 962736 962735 962734 962733 962732 962731 962730 962729 962728 962727 962726 962725 962724 962723 962722 962721 962720 962719 962718 962717 962716 962715 962714 962713 962712 962711 962710 962709 962708 962707 962706 962705 962704 962703 962702 962701 962700 962699 962698 962697 962696 962695 962694 962693 962692 962691 962690 962689 962688 962687 962686 962685 962684 962683 962682 962681 962680 962679 962678 962677 962676 962675 962674 962673 962672 962671 962670 962669 962668 962667 962666 962665 962664 962663 962662 962661 962660 962659 962658 962657 962656 962655 962654 962653 962652 962651 962650 962649 962648 962647 962646 962645 962644 962643 962642 962641 962640 962639 962638 962637 962636 962635 962634 962633 962632 962631 962630 962629 962628 962627 962626 962625 962624 962623 962622 962621 962620 962619 962618 962617 962616 962615 962614 962613 962612 962611 962610 962609 962608 962607 962606 962605 962604 962603 962602 962601 962600 962599 962598 962597 962596 962595 962594 962593 962592 962591 962590 962589 962588 962587 962586 962585 962584 962583 962582 962581 962580 962579 962578 962577 962576 962575 962574 962573 962572 962571 962570 962569 962568 962567 962566 962565 962564 962563 962562 962561 962560 962559 962558 962557 962556 962555 962554 962553 962552 962551 962550 962549 962548 962547 962546 962545 962544 962543 962542 962541 962540 962539 962538 962537 962536 962535 962534 962533 962532 962531 962530 962529 962528 962527 962526 962525 962524 962523 962522 962521 962520 962519 962518 962517 962516 962515 962514 962513 962512 962511 962510 962509 962508 962507 962506 962505 962504 962503 962502 962501 962500 962499 962498 962497 962496 962495 962494 962493 962492 962491 962490 962489 962488 962487 962486 962485 962484 962483 962482 962481 962480 962479 962478 962477 962476 962475 962474 962473 962472 962471 962470 962469 962468 962467 962466 962465 962464 962463 962462 962461 962460 962459 962458 962457 962456 962455 962454 962453 962452 962451 962450 962449 962448 962447 962446 962445 962444 962443 962442 962441 962440 962439 962438 962437 962436 962435 962434 962433 962432 962431 962430 962429 962428 962427 962426 962425 962424 962423 962422 962421 962420 962419 962418 962417 962416 962415 962414 962413 962412 962411 962410 962409 962408 962407 962406 962405 962404 962403 962402 962401 962400 962399 962398 962397 962396 962395 962394 962393 962392 962391 962390 962389 962388 962387 962386 962385 962384 962383 962382 962381 962380 962379 962378 962377 962376 962375 962374 962373 962372 962371 962370 962369 962368 962367 962366 962365 962364 962</b>									

# NOTICE OF LAND DISPOSAL RESTRICTION OF WASTE

<b>T O</b>	Designated Facility
	Safety Kleen Corp.
	Address
	1142 Greenhill Rd. West Chester, PA 19380

EPA ID No.	Designated Facility PAD000738849
------------	-------------------------------------

Under manifest number PAC 1989411 the generator noted below is shipping to you a waste determined to be restricted under 40 CFR 268. In accordance with 40 CFR 268.7, the generator hereby provides notice that the waste is restricted and the EPA waste type and the appropriate treatment standards are as follows:

**CHECK ALL THAT APPLY:**

✓	LINE NO.	WASTE NAME	EPA WASTE TYPE	RESTRICTED CONSTITUENTS	TREATMENT STANDARD (mg/l)
		Petroleum naphtha	D001	Halogenated Organic Compounds Lead	1000 500
		Petroleum naphtha (sludge)	D001, D006, D008	Halogenated Organic Compounds Lead Cadmium	1000 500 100
		Compound Cleaning Liquid (Immersion Cleaner)	F002, F004	Cresylic Acid 1,2-dichlorobenzene Methylene chloride	0.75 0.125 0.96
		Tetrachlorethylene	F002	Tetrachlorethylene	0.05
		Trichlorotrifluoroethane	F002	Trichlorotrifluoroethane	0.96
		Paint Related Material	F003, F005	Acetone Methyl Ethyl Ketone Methyl Isobutyl Ketone Toluene Xylene	0.59 0.75 0.33 0.33 0.15

The constituent composition is based upon knowledge of the waste.

Generator Name <u>Mr. Del Q</u>	EPA ID # <u>PAC 990550594</u>
Generator Representative Signature <u>Donald Bramble</u>	
Name & Title of Representative (Print or Type) <u>Donald Bramble</u> <u>MANHINE SHOP FOREMAN</u>	
S-K Sample Number	



# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

PAD980550594

Manifest Document No.

89005

2. Page 1 of 1

Information in the shaded areas is not required by Federal law but is required by State law.

3. Generator's Name and Mailing Address

Sun Refining and Marketing Co  
P O Box 426 Marcus Hook, PA 19061

4. Generator's Phone ( 215 447 1178

5. Transporter 1 Company Name

Waste Conversion Inc

6. US EPA ID Number

PAD085690592

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address

Waste Conversion Inc  
2869 Sandstone Drive  
Hatfield, PA 19440

10. US EPA ID Number

PAD085690592

A. State Manifest Document Number  
PAC 1001431

B. State Gen. ID  
SAMS

C. State Trans. ID

PA-AH 0139

D. Transporter's Phone ( 215 822 8996

E. State Trans. ID

PA-AH

F. Transporter's Phone ( )

G. State Facility's ID

H. Facility's Phone ( 215 822 8996

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

a. RQ Waste Sodium Dichromate  
ORM-A NA1479

(D007)

12. Containers

No.

Type

13. Total Quantity

14. Unit Wt/Vol

I. Waste No.

001 DT x 1720 P D007

J. Additional Descriptions for Materials Listed Above (include physical state and hazard code)

Lab Pack

Physical State

Lab Pack

Physical State

a. ☐ S L.C. (E) WC13618

c. ☐ ☐

K. Handling Codes for Wastes Listed Above

a. SO2

c.

b. ☐ ☐

d. ☐ ☐

b.

d.

15. Special Handling Instructions and Additional Information

P O #

Cal List #1

Sodium Dichromate 100%

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Richard E. White

Signature

Richard E. White

MONTH DAY YEAR

2 1 1

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Ross Peters

Signature

Ross Peters

MONTH DAY YEAR

12 06 89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

MONTH DAY YEAR

19. Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

Miguel A. Perez

Signature

Miguel A. Perez

MONTH DAY YEAR

12 06 89

GENERATOR

TRANSPORTER

CITY

PAC 1001431

Inspector: Andrew Horton  
 Address: 992 Old Eagle School Rd.  
Suite 919, Wayne PA 19087  
 Telephone No: 215-293-0450

# RCRA LAND DISPOSAL RESTRICTION GENERATOR CHECKLIST

## I. HANDLER IDENTIFICATION

Sun Refining and Marketing Co. PO Box 426  
 A. Handler Name B. Street (or other identifier)  
Marcus Hook PA 19061-0426  
 C. City D. State E. Zip Code F. County Name  
Oil Refinery  
 G. Nature of Business; Identification of Operations: SIC Code(s)  
PAD980550594  
 H. EPA ID #  
Richard E. Ware 215-497-1178  
 I. Handler Contact (Name and Phone Number)

## II. GENERATOR COMPLIANCE

Comments

### A. Waste Identification

#### 1. F-Solvents

a. Does the handler generate the following wastes?

(1) F001, F002, F004, or F005 ☒ Yes ☐ No

(11) F003 ☐ Yes ☒ No

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic?

☐ Yes ☐ No

b. Source of the above: Form 8700-12 ☐; Part A ☐; Part B ☒; Biennial/Annual Reports ☒  
 other (specify) manifests

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that

Handler Name: Richard Wore  
 ID Number: PA0980550594  
 Inspector: Andrew Hoplar  
 Date: 5/23/90

Comments

solvent wastes may be misclassified or mislabeled, turn to  
 Appendix A-1. To assist in identifying potentially  
 misclassified F-solvents, Appendix A-2 presents a list of  
 corresponding P and U wastes. Note concerns below: \_\_\_\_\_

## Dioxin wastes

- a. Does the handler report the generation of the  
 following wastes? (The following industries  
 may generate listed dioxin wastes: organic  
 chemicals, pesticide or formulator.)

(i) F020 - F023, F026 - F027 ☐ Yes ☒ No  
 (ii) F028 ☐ Yes ☒ No

[F-solvent BDAI standards are presented as Appendix B]

## 3. California List Waste Identification

- a. Does the facility handle any of the following  
 wastes?

(i) D002 ☒ Yes ☐ No  
 (ii) D004 - D011 ☒ Yes ☐ No

- b. Does the generator handle any hazardous wastes  
 characterized by high concentrations of halo-  
 genated organic compounds (HOCs), metals, or  
 cyanides? ☒ Yes ☐ No

[California List waste standards are presented as  
 Appendix C]

- c. Is the generator handling any of the F, K, P,  
 or U wastes subject to the "soft hammer" that  
 may qualify as California List wastes due to  
 HOC, metals, or cyanide content? See Appendix  
 D for a listing of California constituents  
 likely to be found by waste code. ☐ Yes ☒ No

- d. Has the generator conducted the paint filter  
 liquids test (Method 9095) [§268.32(i)]?  
☐ Yes ☒ No\*

Handler Name: Richard Ware  
 ID Number: PA0980550594  
 Inspector: Andrew Hopkin  
 Date: 5/23/90

Comments

- e. Has the generator conducted any testing of these hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California List wastes? ☒ Yes ☐ No

If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste?

☐ Yes ☐ No

- If "no" is answered to both parts of this question, a violation is indicated. [§268.7(a)]

Describe the nature of the records: \_\_\_\_\_

- f. Source of the above: Form 8700-12 ☐; Part A ☐; Part B ☒; Biennial/Annual Report ☒; other (specify) ☒. manifests and inspection interview

## 4. First Third Waste Identification

- a. Does the generator handle any of the wastes listed as First Third Wastes in §268.10? See Appendix E for listing. List First Third Wastes handled by the generator here: \_\_\_\_\_

K050, K051

- b. Does the generator handle any soft-hammer wastes (Appendices D-1, D-2, and F)? If so, list those wastes: NO

- c. Are any of the soft-hammered wastes California List wastes (see Appendix G)? ☐ Yes ☒ No *NA*

If yes, the wastes must meet BDAT standards prior to disposal.

- d. Has the Regional Administrator received demonstrations/certifications for all soft hammered wastes to be land disposed [§268.8(a)(2)]? ☐ Yes ☒ No\* *NA*

Handler Name: Richard Ware  
 ID Number: PA80550594  
 Inspector: Andrew Gephart  
 Date: 5/23/90

Comments

- e. Source of the above: Form 8700-12     ; Part A ✓;  
 Part B ✓; Biennial/Annual Report ✓;  
 other (specify) ✓ interview with Fpc. Rep

BDAT Treatability Group - Treatment Standards  
Identification

1. Does the generator mix restricted wastes with different treatment standards for constituents of concern? ✓ Yes ~~No~~ APH
2. If yes, did the generator select the most stringent treatment standard for the constituent of concern [§268.41(b)]? ✓ Yes No\* NA APH

## 3. F Solvents

- a. Did the generator correctly determine the appropriate treatability group [§268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)? ✓ Yes No\*

## 4. California List Wastes

- a. Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [§268.32(h)]? ✓ Yes No\*

## 5. First Third Wastes

- a. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% total suspended solids) [§268.7(a)]? ✓ Yes No\*
- b. Does the facility handle K061 wastes? ✓ Yes No

Handler Name: Richard Ware  
 ID Number: PA0980550594  
 Inspector: Andrew Hylen  
 Date: 5/23/90

Comments

If yes, were nonwastewaters appropriately classified in either the high or low zinc subcategories (>15% Zn) §268.7(a) §268.41(a)]?

Yes No\* **NA**

- c. Does the facility handle K101 or K102 wastes?

Yes No

If yes, were nonwastewaters appropriately classified in either the high or low arsenic subcategories [§268.7(a) §268.41(a)]?

Yes No\* **NA**

- d. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)?

Yes No

C. Waste Analysis

1. Did the generator determine whether the waste exceeds treatment standards based on §268.7(a):

- a. Knowledge of wastes Yes No

(1) List wastes for which "applied knowledge" was used: K050, K051, F002, D001  
D007, D002, F002/F004

- b. TCLP Yes No

(1) List wastes for which "TCLP" was used:

(11) Appendix E lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP? Yes No

If yes, list: K050, K051, using EP-TOX  
F002/F004

Facility contact stated that Sun will begin testing using TCLP on K050, K051

Handler Name: Richard Wore  
 ID Number: PA0980550594  
 Inspector: A. Hipton  
 Date: 3/23/00

Comments

c. Total waste analysis ☒ Yes ☐ No

d. If files were retained, describe content and basis of applied knowledge determination:

provide anal. results for EP TOX  
ignitability, Total const., reactivity

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: Testing done 1 per year for filter culco

Note which wastes were subjected to which tests: \_\_\_\_\_

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) \_\_\_\_\_

e. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [§264.13(a)(3)(1) or §265.13(a)(3)(1)]? ☒ Yes ☐ No\*

2. Did the restricted wastes exceed applicable treatability group treatment standards upon generation [§268.7(a)(1)]?

List those that exceeded standards: \_\_\_\_\_

F002/F004, D001, K050 Note K051 has been delisted by PA and only goes to PA Landfills

List those that did not exceed standards: \_\_\_\_\_

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [§268.3] ☐ Yes\* ☒ No

Handler Name: Richard Ware  
 ID Number: PA0990550594  
 Inspector: A. Hopton  
 Date: 5/23/90

Comments**D. Management****1. Onsite management**

- a. Were restricted wastes managed onsite?  
☒ Yes ☐ No

If no, go to "2".

- b. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted?  
☐ Yes ☒ No

If yes, TSD checklist must be completed.

**2. Offsite Management**

- a. If restricted wastes exceed treatment standards, did generator provide treatment or storage facility notification with each shipment? [§268.7(a)(1)]:

(i) EPA Hazardous Waste Number? ☒ Yes ☐ No\*

(ii) Corresponding treatment standard?  
☒ Yes ☐ No\*

(iii) Manifest number? ☒ Yes ☐ No\*

(iv) Waste analysis, if available?  
☒ Yes ☐ No

Identify offsite treatment facilities \_\_\_\_\_

Waste Conversions, Safety Klean

- b. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including [§268.7(a)(2)]:

(i) EPA hazardous waste I.D. number?  
☐ Yes ☐ No\* **NA**

(ii) Corresponding treatment standard?  
☐ Yes ☐ No\* **NA**



Handler Name: Rich. Ware  
ID Number: PA0980550594  
Inspector: A. Hepten  
Date: 5/23/90

Comments

(iii) Certification regarding waste and that it meets treatment standards? Yes No\*

Identify land disposal facilities receiving the BDAT certified wastes \_\_\_\_\_

c. If the generator's waste is subject to a §268.5 case by case exemption, a §268.6 "no migration" exemption, or a nationwide variance (see Appendix H for restricted wastes subject to nationwide variances), does the generator's records indicate that he or she submits with each waste shipment [§268.7(a)(3)]:

(i) EPA Hazardous Waste Number? Yes No\*

(ii) Corresponding Treatment Standards? Yes No\*

(iii) All applicable prohibitions? Yes No\*

(iv) The manifest number? Yes No\*

(v) The date the wastes are subject to prohibitions? Yes No\*

(vi) Does generator keep records of all notifications/certifications sent to offsite facilities? Yes No\*

List all prohibited wastes for which records are not provided per above §268.7(a)(b):  
\_\_\_\_\_  
\_\_\_\_\_

Identify TSDFs receiving any prohibited wastes subject to any exemptions and variances:  
\_\_\_\_\_  
\_\_\_\_\_

NA

Handler Name: Rich Ware  
 ID Number: PA0980550594  
 Inspector: A. Hopkin  
 Date: 5/23/90

Comments

- d. If handler generates a "soft hammer" waste, does the generator send with each "soft hammer" waste shipment to a TSDF and retain copies of, a notice that includes [268.7(a)(4)]:

The EPA Hazardous Waste Number? ☐ Yes ☐ No\*

Applicable prohibitions? ☐ Yes ☐ No\*

The manifest number? ☐ Yes ☐ No\*

Waste analysis data, where available?  
☐ Yes ☐ No

- (i) Do the generator's records indicate that any soft-hammer wastes are destined for disposed in a landfill or surface impoundment [§268.33(f)]? ☐ Yes ☐ No

If yes, list facility of destination and waste of concern §268.8(a)(2)]

- (ii) Has the generator submitted demonstrations and certifications for each "soft-hammered" waste destined to be disposed in landfill or surface impoundment to the Regional Administrator prior to the shipment of waste to the TSDF §268.7(a)(2)]? ☐ Yes ☐ No\*

- (iii) Has the generator retained a copy of the demonstration on site §268.8(a)(3)-(a)(4)]? ☐ Yes ☐ No\*

- (iv) Has the generator retained copies of all §268.8 certifications sent to the TSDF §268.7(a)(6)] ☐ Yes ☐ No\*

- (v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [§268.8(a)(3)-(a)(4)]? ☐ Yes ☐ No\*

NA

Handler Name: Rich Ware  
ID Number: DA0980550594  
Inspector: A. Hopton  
Date: 5/23/90

Comments

(vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation[§268.8(b)(3)]?

☐ Yes ☒ No\*

Storage of Prohibited Waste

1. Were prohibited wastes stored for greater than 90 days? ☐ Yes ☒ No

If yes, was facility operating as a TSD under interim status or final permit [§262.34(b)]?

☐ Yes ☒ No\*

If yes, TSDF Checklist must be completed.

Treatment Using RCRA 264/265 Exempt Units or Processes  
(i.e., boilers, furnaces, distillation units, waste-water treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? ☐ Yes ☒ No

If yes, list type of treatment unit and processes

If yes, TSDF checklist must be completed.

Handler Name: Richard Ware  
 ID Number: PAD980550594  
 Inspector: A. Hopton  
 Date: 5/23/90

## TRANSPORTER CHECKLIST

## I. FACILITY IDENTIFICATION

Sun Refining and Marketing Co. PO Box 426  
 A. Site Name B. Street (or other identifier)  
Marcus Hook PA 19061-0426  
 C. City D. State E. Zip Code F. County Name  
Petroleum Refinery  
 Description of Operations  
PAD980550594  
 H. EPA ID #  
Richard Ware 215-447-1178  
 I. Facility Contact (Name and Phone Number)

## II. TRANSPORTER REQUIREMENTS

Facility does have RCRA status as a transporter  
 Comments  
 Facility has a  
 transporter's license but  
 does not use it  
 NA

A. Does the transporter store restricted wastes for greater than 10 days [§268.50(a)(3)]? Yes No  
 1. If yes, does transporter have 264/265 status as storage facility (e.g., has submitted part A7)? Yes No

B. Describe inventory controls to ensure that restricted wastes are not stored for greater than 10 days.  
 \_\_\_\_\_  
 \_\_\_\_\_

C. Does the transporter mix restricted wastes prior to transport to a TSDF? Yes No  
 1. If yes, list the restricted wastes that have been mixed:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* / A potential violation is indicated

Handler Name: Richard Ware  
ID Number: PAD980SS0594  
Inspector: A. Hopfen  
Date: 5/23/98

Comments

List instances where soft hammer wastes have been mixed with restricted wastes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Obtain a list of generators for whom restricted wastes have been transported.

Obtain a list of treatment, storage and disposal facilities which frequently receive restricted wastes.

NA

Facility Name: Richard Ware  
 ID Number: PAD980550594  
 Inspector: A. Hopfen  
 Date: 5/23/90

**RCRA LAND RESTRICTION  
TREATMENT, STORAGE, AND DISPOSAL REQUIREMENTS CHECKLIST**

**I. FACILITY IDENTIFICATION**

San Refining and Marketing Co. PO Box 426  
 A. Facility Name B. Street (or other identifier)  
Marcus Hook PA 19061-0426  
 C. City D. State E. Zip Code F. County Name  
Petroleum Refining  
 G. Nature of business; identification of industrial and waste management operations;  
 relevant SIC codes  
PAD980550594  
 H. EPA ID #

Richard E. Ware 215-447-1178  
 I. Facility Contact (Name and Phone Number)

II.A. For onsite facilities, complete the generator checklist Comments

**B. General Facility Standards****1. General**

a. Does the facility conduct waste analysis (total and TCLP) on-site or through a commercial laboratory?  
Both are Commercial Lab / Age<sup>one</sup> AGES, Norristown, PA.

b. Describe the frequency of sampling conducted by the facility.  
Vary. sludge filter cake, 1x/yr  
Semi-annual for all wastes (API sludge if taken out of state)

2. Treatment Facilities Facility does dewater sludge which is delisted by state.

a. Has the treatment facility revised its waste analysis plan [§268.7(b)] to meet the requirements of §264.13 or §265.13? Yes No\*

(i) Is the treatment facility conducting TCLP tests for wastes specified in Appendix A (i.e., those prohibited wastes subject to treatment standards expressed as waste extracts) per §286.7(b)(1)? Yes No\*

NA

\* A potential violation is indicated

Facility Name: Sun Oil Marcus Hook  
 ID Number: PA 980550599  
 Inspector: A. Hopkin  
 Date: 5/23/98

Comments

- (11) Is the treatment facility using the paint filter liquid test for the California List waste residues [§268.7(b)(11)]? Yes ☒ No
- (111) Is the treatment facility testing the pH of California waste residues? Yes No
- (iv) Is the treatment facility testing concentrations (not extracts) in the waste residues for prohibited wastes with established treatment standards expressed as waste concentrations [§268.7(b)(3)]? Yes No\*
- (v) Is the treatment facility testing extracts of the waste residues for prohibited wastes having established treatment standards expressed as extract concentrations [§268.7(b)(1)]? Yes No\*

Land Disposal Facilities

- a. Has the facility retained all notices and certifications from generators, storage and treatment facilities [§268.7(c)(1)]? Yes No\*
- b. Are wastes and waste residues tested for compliance with applicable treatment standards and prohibitions [§268.7(c)(2)]? Yes No\*
- c. Are they being tested in conformance with the frequency specified in the waste analysis plan [§268.7(c)(3)]? Yes No\*
- d. Are the appropriate tests (TCLP vs. total waste) being used [§268.7(c)(2)]? Yes No\*

Storage (§268.50)

- a. Are restricted wastes exceeding treatment standards stored (excepting wastes subject to no migration exemptions, nationwide variances, case by case extensions, soft-hammered wastes)? ☒ Yes No

If no, go to "c."

A potential violation is indicated

Facility Name: Sun Oil Marcus Hot  
 ID Number: PA0990550594  
 Inspector: A. Hapkin  
 Date: 5/23/90

Comments

- b. Are all containers clearly marked to identify content and date(s) entering storage [§268.50(a)(2)]? ☒ Yes ☐ No\*

- c. Do operating records track the location, quantity and dates that wastes exceeding treatment standards entered and were removed from storage [§264.73 or §265.73]? ☒ Yes ☐ No\*

- d. Do operating records agree with container labeling? [§268.50(a)(2) or §264.73 or §265.73] ☒ Yes ☐ No\*

- e. Is waste exceeding treatment standards stored for less than 1 year? ☒ Yes ☐ No

If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal? ☐ Yes ☒ No

If yes, state how: \_\_\_\_\_

- f. Was/is waste exceeding treatment standards stored for more than one year? ☐ Yes ☒ No

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal: \_\_\_\_\_

**D. Treatment in Surface Impoundments (§268.4)**

1. Are prohibited wastes placed in surface impoundments for treatment? ☐ Yes ☒ No

If no, go to E.

2. Is the only recognizable "treatment" occurring in the impoundment either evaporation, dilution, or both [§268.4(b) and §268.3]? ☐ Yes\* ☐ No

\* A potential violation is indicated



Facility Name: Sun Oil Marcus Hook  
ID Number: DA0980550594  
Inspector: A. Hopkin  
Date: 5/23/98

Comments

NA

3. Did the facility submit a certification of compliance with minimum technology and ground water monitoring requirements, and the waste analysis plan to the Agency [§268.4(a)(4)]? ☐ Yes ☒ No\*
4. Have the minimum technology requirements been met [§268.4(a)(3)]? ☐ Yes ☒ No\*
- a. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s) [§268.4(a)(3)(iii)]? ☐ Yes ☒ No\*
5. Have the Subpart F ground-water monitoring requirements been met [§268.4(a)(3)]? ☐ Yes ☒ No\*
6. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record for all wastes with treatment standards or prohibition levels [§268.4(a)(2)]? ☐ Yes ☒ No\*
7. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards or prohibition levels? ☐ Yes ☒ No
8. Provide the frequency of analyses conducted on treatment residues: \_\_\_\_\_
- Does the frequency meet the requirements of the waste analysis plan [§264.13 or §265.13]? ☐ Yes ☒ No\*
9. Does the operating record adequately document the results of waste analyses performed [§264.13 or §265.13]? ☐ Yes ☒ No\*
10. Have the hazardous waste residues that exceed the treatment standards and/or prohibition levels been removed adequately and on an annual basis [§268.4(a)(2)(ii)]? ☐ Yes ☒ No\*

\* A potential violation is indicated

Facility Name: Sun Oil Marcus Hook  
 ID Number: DAD 980550594  
 Inspector: A. Hopkin  
 Date: 5/23/96

Comments

NA

- a. If answer to 6 is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume? (note: sludge exceeding treatment standards must be removed) ☐ Yes ☐ No
11. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed? ☐ Yes ☐ No
12. When removed, were residues of restricted wastes managed subsequently in another surface impoundment? ☐ Yes ☐ No
- a. Were these residues subject to a valid 268.8 certification? ☐ Yes ☐ No\*
13. When removed, were wastes treated prior to disposal? ☐ Yes ☐ No
- a. If yes, are waste residues treated on or offsite? ☐ Onsite ☐ Offsite
- b. Identify management method \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

E. Treatment

1. Does the facility operate treatment units (regulated or exempt) (not including surface impoundments)? ☐ Yes ☒ No

If no, go to "F."

2. Describe the treatment processes, including exempt processes.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

3. Does the facility treat soft hammered wastes? ☐ Yes ☒ No

Facility dewaterers  
 API sludge which  
 is delisted by State of PA  
 and Filter cake disposed of  
 as non-hazardous waste.

\* A potential violation is indicated

Facility Name: Sun Oil Marcus Hook  
ID Number: PAD 980550594  
Inspector: A. Hapton  
Date: 5/23/90

Comments

a. If yes, is treatment occurring as described in the generator's certification/demonstration [§268.8(c)(1)]? ☐ Yes ☐ No\*

b. Did the treatment facility certify he treated the soft hammered waste as per the generator's demonstration and maintain copies of all certifications [§268.8(c)(1)]? ☐ Yes ☐ No\*

c. Did the treatment facility send a copy of the generator's demonstration and certification to the receiving treatment, recovery, disposal or storage facility [§268.8(c)(2)]? ☐ Yes ☐ No\*

4. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the restricted wastes are less than treatment standards or prohibition levels [§268.7(c)(2)]? ☐ Yes ☐ No\*

Describe frequency of testing of treatment residuals.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Was dilution used as a substitute for treatment [§268.3]? ☐ Yes\* ☐ No

7. Are all notifications, certifications, and results of waste analyses kept in the operating record [§264.73(b) or §265.73(b)]? ☐ Yes ☐ No\*

Are notices provided to land disposal facilities complete with Waste Number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [§268.7(b)(4) and (5) and §268.8(c)(1)]? ☐ Yes ☐ No\*

If the waste or treatment residue will be further managed at another storage or treatment facility, has the treatment facility complied with the 268.7(a) notification and certification requirements applicable to generators [§268.7(b)(6)]? ☐ Yes ☐ No\*

A potential violation is indicated

\*\*Do not include SIs addressed under Section "D" of this checklist

Facility Name: Sun Oil Maras Hook  
 ID Number: PAD980550594  
 Inspector: A. Hopkin  
 Date: 5/23/90

Comments**F. Land Disposal**

1. Are restricted and/or prohibited wastes placed in land disposal units (landfills, surface impoundments\*\* waste piles, wells, land treatment units, salt domes/beds, mines/caves concrete vault or bunker?) ☐ Yes ☐ No

2. Did facility have the notice and certification from generators/treaters in its operating record that all prohibited wastes disposed met standards for generation or treatment [§268.7(c)(1); 268.7(a),(b)]? ☐ Yes ☐ No\*

3. Did the facility obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards [§268.7(c)(2)] ☐ Yes ☐ No\*

If yes, was the frequency of testing as required by the facility's waste analysis plan [§264.13 or §265.13]? ☐ Yes ☐ No\*

4. Were prohibited wastes exceeding the applicable treatment standards or prohibition levels placed in land disposal units [§268.30] excluding national capacity variances [§268.30(a)]? ☐ Yes ☐ No

If yes, did facility have an approved waiver based on no migration petition [§268.6] or approved case-by-case or capacity extension [§268.5] or treatment standard variance [268.44] [§268.30(d), §268.31(d), §268.32(g), §268.33(e)]? ☐ Yes ☐ No\*

5. Were restricted wastes subject to a national capacity variance or case-by-case extension disposed? ☐ Yes ☐ No

If yes, have the minimum technology requirements been met for all units receiving such wastes [§268.30(c), §268.31(c), §268.32(d), §268.33(d)]? ☐ Yes ☐ No\*

6. Were adequate records of disposal maintained [§264.73(b) or §265.73(b)]? ☐ Yes ☐ No\*

\* A potential violation is indicated

\*\*Do not include SIs addressed under Section "D" of this checklist

Facility Name: Sun Oil Marcus Hook  
 ID Number: PAD980550594  
 Inspector: A. Hopkin  
 Date: 5/23/90

Comments

If wastes subject to a nationwide variance, case-by-case extensions (§268.5), or no migration petitions (§268.6) were disposed, does facility have generator's notices (§268.7(a)(3)) and records of disposal? (§264.73(b) or §265.73(b))

☐ Yes ☒ No\*

If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports?

☐ Yes ☒ No

If the owner/operator is disposing of a soft hammer waste, is he maintaining the generators and treaters (if applicable) notices and certifications (§268.8(a)(2)-(a)(4))?

☐ Yes ☒ No\*

a. Is the facility disposing of any soft hammer wastes that may be classified as California List wastes?

☐ Yes ☒ No

b. Did the facility seek to verify whether these wastes may be subject to all restrictions, e.g., California ban?

☐ Yes ☒ No

NA

\* A potential violation is indicated

\*\*Do not include SIs addressed under Section "D" of this checklist

## EXHIBIT IV-1

GENERAL SITE INSPECTION INFORMATION FORM

Sun Refining and Marketing Co. PO BOX 426  
 A. Site Name B. Street (or other identifier)  
Marcus Hook PA 19061-0426  
 C. City D. State E. Zip Code F. County Name

## G. Site Operator Information

1. Name 2. Telephone Number  
 3. Street 4. City 5. State 6. Zip Code

## H. Site Description

Petroleum Refinery

## I. Type of Ownership

1. Federal 2. State 3. County 4. Municipal ✓5. Private

## J.

✓1. Generator ✓2. Transporter 3. Treatment ✓4. Storage 5. Disposal

## K. Regulatory Status

✓1. Interim Status ✓3. Part B Permit Application Submitted  
2. Permitted Facility 4. Part B Permit Application in Preparation

## L.

1. Principal Inspector Name Andrew Hopton 3. Organization CDM FPC  
 2. Title Environmental Scientist 4. Telephone No. (area code and No.) 215-293-0450

## M. Inspection Participants

1. <u>A. Hopton</u>	<u>FPC</u>	6.
2. <u>Chris Cherniak</u>	<u>FPC</u>	7.
3. <u>Richard Ware</u>	<u>Sun</u>	8.
4.		9.
5.		10.

EXHIBIT IV-2

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? ☒ Yes ☐ No
- a. If yes, EPA I.D. No. P A D 9 8 0 5 5 0 5 9 4  
If no, explain. \_\_\_\_\_
2. Has facility received hazardous waste from a foreign source? ☐ Yes ☒ No
- a. If yes, has it filed a notice with the Regional Administrator? ☐ Yes ☐ No

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? ☒ Yes ☐ No
- a. If yes, does it include:
- 1. Parameters for which each waste will be analyzed? ☒ Yes ☐ No
  - 2. Test methods used to test for these parameters? ☒ Yes ☐ No
  - 3. Sampling method used to obtain sample? ☒ Yes ☐ No
  - 4. Frequency with which the initial analyses will be reviewed or repeated? ☒ Yes ☐ No
  - 5. (For offsite facilities) waste analyses that generators have agreed to supply? ☐ Yes ☐ No
  - 6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:
    - a. Procedures to be used to determine the identity of each movement of waste. ☐ Yes ☐ No
    - b. Sampling method to be used to obtain representative sample of the waste to be identified. ☐ Yes ☐ No
4. Does the facility provide adequate security through:
- a. 24-hour surveillance system (e.g., television monitoring or guards)? ☒ Yes ☐ No

OR

(continued)

EXHIBIT IV-2 (continued)

- b. 1. Artificial or natural barrier around facility ☒ Yes ☐ No  
(e.g., fence or fence and cliff)?

Describe Fence

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? ☒ Yes ☐ No

Describe Gates

General Inspection Requirements

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- |  |   |
|--|---|
| a. Monitoring equipment?               | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| b. Safety and emergency equipment?     | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| c. Security devices:                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| d. Operating and structural equipment? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| e. Types of problems of equipment:     |   |
| 1. Malfunction                         | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Operator error                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Discharges                          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

6. Does the owner/operator maintain an inspection log? ☒ Yes ☐ No

- a. If yes, does it include:

- |   |   |
|---|---|
| 1. Date and time of inspection?                   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Name of inspector?                             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Notation of observations?                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 4. Date and nature of repairs or remedial action? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) ☐ Yes ☒ No

Personnel Training

7. Does the owner/operator maintain personnel training records at the facility? ☒ Yes ☐ No

(continued)



EXHIBIT IV-2 (continued)

How long are they kept? Total time of persons employment

a. If yes, do they include:

- |  |   |
|--|---|
| 1. Job title and written job description of each position? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 2. Description of type and amount of training?             | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| 3. Records of training given to facility personnel?        | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Requirements for Ignitable, Reactive, or Incompatible Waste

8. Does facility handle ignitable or reactive wastes? ☒ Yes ☐ No

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flame confined to specifically designated locations? ☒ Yes ☐ No

c. Are "No Smoking" signs posted in hazardous areas? ☒ Yes ☐ No

d. Are precautions documented (Part 264 only)? ☒ Yes ☐ No

9. Check containers

a. Are containers leaking or corroding? ☐ Yes ☒ No

b. Is there evidence of heat generation from incompatible wastes? ☐ Yes ☒ No

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? ☐ Yes ☒ No

If yes, use narrative explanation sheet to explain.

(continued)

Barnett

8.A.1.

D001 wastes are contained in sealed thirty gallon containers which are provided by Safety Kleen.

All other ignitable wastes are confined to the API/sewer system which is located below ground, actual separators are covered. All areas of refinery have no - smoking, and no open flame policies.

EXHIBIT IV-2 (continued)

2. Is the facility equipped with:

- a. Internal communication or alarm system? ☒ Yes ☐ No
  - 1. Is it easily accessible in case of emergency? ☒ Yes ☐ No
- b. Telephone or two-way radio to call emergency response personnel? ☒ Yes ☐ No
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? ☒ Yes ☐ No
- d. Water of adequate volume for hoses, sprinklers, or water spray system? ☒ Yes ☐ No

1. Describe source of water Delaware River & Stammwater Reservoir as backup

- 3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? ☒ Yes ☐ No
- 4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) ☒ Yes ☐ No
- 5. In the case that more than one police or fire department might respond, is there a designated primary authority? ☒ Yes ☐ No
  - a. If yes, name primary authority Sun Oil Fire Department
- 6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? ☒ Yes ☐ No
  - a. Are they readily available to all personnel? ☒ Yes ☐ No
- 7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? ☒ Yes ☐ No
- 8. If State or local authorities decline to enter, is this entered in the operating record? ☒ Yes ☐ No

(continued)

EXHIBIT IV-2 (continued)

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? ☒ Yes ☐ No
- a. If yes, is it a revised SPCC Plan? ☒ Yes ☐ No
- b. Does contingency plan include:
1. Arrangements with local emergency response organizations? ☒ Yes ☐ No
2. Emergency coordinators' names, phone numbers, and addresses? ☒ Yes ☐ No
3. List of all emergency equipment at facility and descriptions of equipment? ☒ Yes ☐ No
4. Evacuation plan for facility personnel? ☒ Yes ☐ No
2. Is there an emergency coordinator on site or on call at all times? ☒ Yes ☐ No

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? ☐ Yes ☒ No
- a. If yes, does the owner/operator retain copies of all manifests? ☐ Yes ☐ No
1. Are the manifests signed and dated and returned to the generator? ☐ Yes ☐ No
2. Is a signed copy given to the transporter? ☐ Yes ☐ No
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? ☐ Yes ☒ No
- a. If yes, is it accompanied by a shipping paper? ☐ Yes ☐ No
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? ☐ Yes ☐ No
2. Is a signed copy given to the transporter? ☐ Yes ☐ No
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? ☐ Yes ☐ No *NA*
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? ☐ Yes ☐ No
1. If no, has Regional Administrator been notified? ☐ Yes ☐ No

(continued)

EXHIBIT IV-2 (continued)

4. Does the owner/operator keep a written operating record at the facility? ☒ Yes ☐ No
- a. If yes, does it include:
1. Description and quantity of each hazardous waste received? ☐ Yes ☒ No *NA*
  2. Methods and dates of treatment, storage, and disposal? ☐ Yes ☒ No *NA*
  3. Location and quantity of each hazardous waste at each location? ☐ Yes ☒ No
  4. Cross-references to manifests/shipping papers? ☐ Yes ☒ No
  5. Records and results of waste analyses? ☒ Yes ☐ No
  6. Report of incidents involving implementation of the contingency plan? ☒ Yes ☐ No
  7. Records and results of required inspections? ☒ Yes ☐ No
  8. Monitoring or testing analytical data (Part 264)? ☒ Yes ☐ No
  9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? ☒ Yes ☐ No *NA* *APH*
  10. Notices of generators as specified in §264.12(b) (Part 264)? ☐ Yes ☐ No *NA*
5. Does the facility submit a biennial report by March 1 every even-numbered year? ☒ Yes ☐ No
- a. If yes, do reports contain the following information:
1. EPA I.D. number? ☒ Yes ☐ No
  2. Date and year covered by report? ☒ Yes ☐ No
  3. Description/quantity of hazardous waste? ☒ Yes ☐ No
  4. Treatment, storage, and disposal methods? ☒ Yes ☐ No
  5. Monitoring data under §265.94(a)(2) and (b)(2) (Part 265)? ☐ Yes ☐ No
  6. Most recent closure and post-closure cost estimates? ☐ Yes ☐ No *APH NOT REVIEW*
  7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? ☒ Yes ☐ No
  8. Certification signed by owner/operator? ☒ Yes ☐ No
6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? ☐ Yes ☐ No *NA*
- a. If yes, has he submitted an unmanifested waste report to the Regional Administrator? ☐ Yes ☐ No *NA*
7. Does the facility submit to the Regional Administrator reports on releases, fires, and explosions; contamination and monitoring data; and facility closure? ☒ Yes ☐ No

EXHIBIT IV-3

LAND DISPOSAL RESTRICTIONS CHECKLIST

1. Are hazardous wastes land-disposed on site? ("Land disposal" includes placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, concrete vault, or bunker intended for disposal purposes; and placement in or on the land by means of open detonation and open burning where residues continue to exhibit hazardous characteristics). ☐ Yes ☒ No
  - a. If yes, are one or more of the following circumstances true:
    1. Granted extension from effective date pursuant to §268.5? ☐ Yes ☒ No
    2. Granted exemption from a prohibition pursuant to a petition under §268.6? ☐ Yes ☒ No
    3. Disposing of soil or debris resulting from a CERCLA response action or a RCRA corrective action, which will not be prohibited until November 8, 1988? ☐ Yes ☒ No
    4. Facility is a small quantity generator of less than 100 kg of hazardous waste per month? ☐ Yes ☒ No
2. Are restricted wastes or residuals from treatment of a restricted waste diluted in any way prior to disposal? ☐ Yes ☒ No
3. Are there active surface impoundments used for treatment of hazardous wastes? ☐ Yes ☒ No
  - a. If yes, does the unit's design and operation meet the requirements set forth in §268.4? ☐ Yes ☒ No
4. Has the facility sought exemption from any prohibition under Subpart C of §268 for the disposal of a restricted hazardous waste? ☐ Yes ☒ No
  - a. If yes, has the facility's demonstration included the required components (waste I.D., waste analysis, comprehensive environmental characterization of unit site, QA/QC plan, sampling, testing, modeling)? ☐ Yes ☒ No
5. Has the facility determined whether it generates a restricted waste through waste analysis? ☒ Yes ☐ No
  - a. If yes, is the facility, in fact, handling a restricted waste(s)? ☒ Yes ☐ No

(continued)

EXHIBIT IV-3 (continued)

- b. If yes, does the restricted waste require treatment? ☒ Yes ☐ No ~~NA~~ APH
- c. If yes, has the generator notified the treatment facility in writing, and does the notification include all <sup>known</sup> required components (EPA hazardous waste number, corresponding treatment standard, manifest number of shipment)? ☒ Yes ☐ No ~~NA~~ APH  
waste has been delisted by State of PA
6. Does the facility handle EPA Hazardous Waste Nos. F001 through F005 (solvent wastes)? ☒ Yes ☐ No
- a. If yes, do any of the following conditions apply:
1. The generator of the solvent waste is a small quantity generator (not more than 1000 kg/month)? ☐ Yes ☒ No
  2. The solvent waste is generated from a CERCLA response corrective action? ☐ Yes ☒ No
  3. The solvent waste is a solvent-water mixture, solvent-containing sludge, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001 through F005 solvent constituents. ☐ Yes ☒ No
- b. If no, have any of these restricted wastes been land-disposed (except in an injection well) since November 8, 1986? ☐ Yes ☒ No
7. Does the facility handle EPA Hazardous Waste Nos. F020, F021, F023, F026, F027, or F028 (dioxin-containing wastes)? ☐ Yes ☒ No
- a. If yes, do any of the following conditions apply:
1. Wastes are treated to meet standards of Subpart D of §268? ☐ Yes ☐ No
  2. Wastes are disposed of at a facility that has been granted a petition? ☐ Yes ☐ No
  3. An extension has been granted? ☐ Yes ☐ No
- b. If no, will these restricted wastes be land disposed after November 8, 1988? ☐ Yes ☐ No
8. Are restricted wastes being treated? ☐ Yes ☒ No
- a. If yes, have any of their associated hazardous constituents exceeded the "Constituent in Waste Extract" (CWE) levels? ☐ Yes ☐ No

EXHIBIT IV-4

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

- i. Does generator have EPA I.D. No? ☒ Yes ☐ No
- a. If yes, EPA I.D. No. PA D980550594

Section B - Manifest

1. Does generator ship waste offsite? ☒ Yes ☐ No
- a. If no, do not fill out Sections B and D. APH
- b. If yes, identify primary offsite facility(s). Use narrative explanation sheet. ESOI Hob Oregon Ohio
2. Does generator use manifest? Mericham Houston TX ☒ Yes ☐ No
- a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Delaware County Landfill Hatfield PA ☒ Yes ☐ No
1. If yes, does generator indicate this when sending waste to a TSD facility? ☒ Yes ☐ No
- b. If yes, does manifest include the following information?
1. Manifest document No. ☒ Yes ☐ No
2. Generator's name, mailing address, telephone No. ☒ Yes ☐ No
3. Generator EPA I.D. No. ☒ Yes ☐ No
4. Transporter Name(s) and EPA I.D. No.(s) ☒ Yes ☐ No
5. a. Facility name, address, and EPA I.D. No. ☒ Yes ☐ No
- b. Alternate facility name, address, and EPA I.D. No. ☒ Yes ☐ No
- c. Instructions to return to generator if undeliverable ☒ Yes ☐ No
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) ☒ Yes ☐ No

(continued)



EXHIBIT IV-4 (continued)

7. Emergency information (optional) ☒ Yes ☐ No  
(special handling instructions, telephone No.)

8. Is the following certification on each manifest form? ☒ Yes ☐ No

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? ☒ Yes ☐ No

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? ☒ Yes ☐ No  
2. Who signed for generator?

Name Richard E. Ware Title Sr. Env. Consultant

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? ☒ Yes ☐ No  
2. Who signed and dated for transporter?

Name Steve Leach Title \_\_\_\_\_

c. Does generator retain one copy of manifest signed by generator and transporter? ☒ Yes ☐ No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? ☒ Yes ☐ No

e. Does generator retain copies for 3 years? ☒ Yes ☐ No

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? ☒ Yes ☐ No

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) K050, K051, F002/F004

(continued)

OSWER Dir. No. 9938.2A

IV-11

March 1988

K051 has been delisted by State of PA  
K050 has not been generated recently, not within past ~~year~~ 10 years. 43040 pounds in 1988

F002/F004 = 180 pounds/year

IF sent out of State is listed SPH  
201. Time to ESOI 1st quarter 1989

EXHIBIT IV-4 (continued)

2. Does generator generate solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) ☒ Yes ☐ No

a. If yes, list wastes and quantities D001, D002, D007,  
(include EPA Hazardous Waste No.) D001 6000 pounds quarterly, D007 1720 lbs annual  
D002 1000 pounds "

- b. Does generator determine characteristics by testing or by applying knowledge of processes? knowledge

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? ☐ Yes ☒ No

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? ☐ Yes ☒ No

- a. If yes, did generator test all wastes to determine nonhazardous characteristics? ☐ Yes ☐ No

1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? ☒ Yes ☐ No

2. a. Are containers to be shipped leaking or corroding? ☐ Yes ☒ No

b. Use sheet to describe containers and condition.

- c. Is there evidence of heat generation from incompatible wastes in the containers? ☐ Yes ☒ No

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? ☒ Yes ☐ No

4. Does generator mark each package in accordance with 49 CFR 172? ☒ Yes ☐ No

(continued)

Barnett

Section D

- 2b. All fifty gallon drums were in good condition; no rusting, or leaking drums were noted

EXHIBIT IV-4 (continued)

5. Is each container of 110 gallons or less marked with the following label? ☒ Yes ☐ No

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) \_\_\_\_\_

Manifest document No. \_\_\_\_\_

6. Does generator have placards to offer to transporters? ☒ Yes ☐ No

7. Accumulation time

- a. Are containers used to temporarily store waste before transport? ☒ Yes ☐ No

1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time) ☒ Yes ☐ No

- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) ☒ Yes ☐ No

2. If yes, with what frequency? weekly

- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) ☒ Yes ☐ No

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, -4, and -5 of this form? ☒ Yes ☐ No

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) ☒ Yes ☐ No

8. Describe storage area. Use photos and narrative explanation sheet.

(continued) OSWER DIR. No. 9938.2A IV-13 March 1988

Storage area is not in use  
Storage area is a 16,500 sq. ft concrete pad, with a 6" high berm, a chain link fence on all sides (6' high) filled with runoff and spill collection system.

EXHIBIT IV-4 (continued)

Section E - Recordkeeping and Records

1. Does generator keep the following reports for 3 years?

- |   |   |                             |
|---|---|-----------------------------|
| a. Manifests and signed copies from designated facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Annual reports   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Exception reports                                      | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Test results   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

2. Where are the records kept (at facility or elsewhere)? Facility

3. Who is in charge of keeping the records?

Name \_\_\_\_\_ Title \_\_\_\_\_

Section F - Special Conditions

1. Has generator received from or transported to a foreign source any hazardous waste? ☐ Yes ☒ No

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| a. If yes, has he filed a notice with the Regional Administrator?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Is this waste manifested and signed by a foreign cosignee?  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

EXHIBIT IV-5

TRANSPORTERS CHECKLIST

Section A - EPA I.D. No.

1. Does transporter have an EPA I.D. No.?

Yes ☒ No

a. If yes, what is EPA I.D.? PAD 986550594

*Facility has transporter license but does not use it*

Section B - Transfer Facility Requirements

1. Does transporter store wastes on site?

Yes No

a. If yes, does transporter store wastes longer than 10 days?

Yes No

Section C - Manifests

1. Does transporter use manifests?

Yes No

a. If yes, are manifests signed and dated?

Yes No

b. Does transporter return signed copies of manifests to generators?

Yes No

c. Does transporter carry manifests with waste shipments?

Yes No

d. Does transporter obtain delivery date and signature of owner/operator at delivery?

Yes No

e. Does transporter retain copies?

Yes No

f. Does transporter give remaining copies to accepting transporter or facility?

Yes No

g. Is transporter a water (bulk shipment) transporter?

Yes No

1. If yes, is waste delivered to receiving facility by water?

Yes No

2. Does transporter carry a shipping paper with the waste containing all information required on the manifest (excluding EPA I.D. numbers, generator certification, and signatures)?

Yes No

3. Does transporter obtain delivery date and handwritten signature of owner/operator of designated facility on manifest or shipping paper?

Yes No

4. Does transporter retain copies of shipping papers or manifests, in accordance with §263.22?

Yes No

(continued)

EXHIBIT IV-5 (continued)

- h. Is transporter a rail transporter? ~~NA~~  
~~Yes~~ ~~No~~
1. If yes, when accepting waste from a nonrail transporter, does rail transporter sign and date manifest acknowledging acceptance of waste? ~~Yes~~ ~~No~~
2. Does rail transporter return a signed copy of manifest to nonrail transporter? ~~Yes~~ ~~No~~
3. Does rail transporter forward manifest copies to:
- a. The next nonrail transporter? ~~Yes~~ ~~No~~
- b. Designated receiving facility (if reached by rail)? ~~Yes~~ ~~No~~
- c. The last rail transporter designated to handle the waste in the U.S.? ~~Yes~~ ~~No~~
4. Does rail transporter retain a copy of manifest? ~~Yes~~ ~~No~~
5. Does rail transporter ensure that a shipping paper accompanies the hazardous waste and contains all information required on manifest (excluding EPA I.D., generator certification, and signatures)? ~~Yes~~ ~~No~~
6. Does rail transporter obtain delivery date and handwritten signature of owner/operator of designated facility or the next nonrail transporter on manifest? ~~Yes~~ ~~No~~
7. Does rail transporter retain a copy of the manifest or signed shipping paper? ~~Yes~~ ~~No~~
- i. Does transporter transport waste outside of the U.S.? ~~Yes~~ ~~No~~
1. If yes, does the transporter:
- a. Indicate on manifests the date that shipment left the U.S.? ~~Yes~~ ~~No~~
- b. Sign manifest and retain one copy? ~~Yes~~ ~~No~~
- c. Return a signed copy of manifest to generator? ~~Yes~~ ~~No~~

Section D - Compliance With the Manifest

1. Does transporter deliver entire shipment of hazardous waste to: ~~NA~~  
~~Yes~~ ~~No~~
- a. Designated facility listed on manifest? ~~Yes~~ ~~No~~
- b. Alternate designated facility, if emergency prevents delivery to designated facility? ~~Yes~~ ~~No~~
- c. Next designated transporter? ~~Yes~~ ~~No~~
- d. Place outside U.S. designated by generator? ~~Yes~~ ~~No~~
- e. If no, does transporter contact generator for further directions, and then revise manifest accordingly? ~~Yes~~ ~~No~~

(continued)

EXHIBIT IV-5 (continued)

Section E - Recordkeeping

1. Does transporter keep a copy of manifest signed by generator, himself, and next designated transporter for 3 years? ☐ Yes ☒ No
2. Does water (bulk shipment) transporter retain copy of shipping paper for each shipment delivered by water? ☐ Yes ☒ No
3. Does initial rail transporter keep a copy of manifest and/or shipping paper? ☐ Yes ☒ No
4. Does transporter shipping waste outside of the U.S. keep for 3 years copy indicating that waste was shipped? ☒ Yes ☐ No

NA



EXHIBIT IV-6

CONTAINERS CHECKLIST

Section A - Use and Management

1. Are containers in good condition? ☒ Yes ☐ No

Section B - Compatibility of Waste With Container

1. Is container made of a material that will not react with the waste which it stores? ☒ Yes ☐ No

Section C - Management of Containers

1. Is container always closed while holding hazardous waste? ☒ Yes ☐ No
2. Is container handled so that it will not be opened, handled, or stored in a manner which may rupture it or cause it to leak? ☒ Yes ☐ No

Section D - Inspections

1. Does owner/operator inspect containers at least weekly for leaks and deterioration? ☒ Yes ☐ No

Section E - Containment (Part 264)

1. Do container storage areas have a containment system? ☒ Yes ☐ No

Section F - Ignitable and Reactive Waste

1. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines? ☒ Yes ☐ No

Section G - Incompatible Waste

1. Are incompatible wastes or materials placed in the same containers? ☐ Yes ☒ No
2. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste? ☐ Yes ☒ No

(continued)

EXHIBIT IV-6 (continued)

3. Are incompatible hazardous wastes separated from each other ~~Yes~~ ~~No~~  
by a berm, dike, wall, or other device?

Section H - Closure (Part 264)

1. At closure, were all hazardous wastes and associated residues ~~Yes~~ ~~No~~  
removed from the containment system?

AI60

314

U. S. Environmental Protection Agency  
Environmental Services Division  
EPA, Region III

AIR COMPLIANCE INSPECTION REPORT  
OIL REFINERY

1. GENERAL INFORMATION

Company Name: Sun Refining and Marketing

Address: Market Street, Marcus Hook, PA

CDS# 39-1660-00035

Form of Ownership: Corporate

Company Phone Number (215) 447-1198

Company Personnel/Title Art Meritt

State Personnel/Title Neil O'Connor, PA DER

EPA Personnel/Title Mike Giuranna, Jim Gouvas, ESD Jeannine Kubli, AMD

Date of Inspection 3/14,15/90 Arrival 9:30AM Depart 4:45PM

2. SPECIFIC INFORMATION

Type of Facility Receive Crude Oil from Tankers and process it into gasoline, various oils, and light gases. This processing is done distillation and catalytic cracking.

Daily Production: Days/Week 7 Hours/Day 24 Shifts/Day 3

Rated Production Rate/Day 190,000 barrels/day

Actual Production Rate/Day 190,000 barrels/day

Number of Employees

3. SOURCES INSPECTED

For this inspection we targetted 5 processes to inspect. They were:

1. Benzene Storage tanks and refinery components in benzene service under 40 CFR Part 61 Subparts V and J.
2. All storage tanks greater than 40,000 gallons capacity containg VOC's( PA reg. 129.56).
3. Possible sources of particulate emissions including the fluid catalytic cracking unit and the process boilers.
4. All fugitive VOC sources, specifically components in VOC service for which Sun is required to conduct quarterly leak checks.
5. Any sulfur recovery or sulfur handling processes which could result in sulfur releases to the atmosphere.

#### 4. PROCESS INSPECTIONS

##### 4.1. BENZENE TANKS AND COMPONENTS IN BENZENE SERVICE

Sun's petrochemical unit contains a 17-2 Udex unit, which sends purified and recycled toluene to the 15-5 Toluene Disproportionation Unit (TDP). In the TDP toluene reacts in the presence of a catalyst to form benzene and xylene.

There are 7 benzene storage tanks and approximately 2,000 components (valves, compressors, etc.) in benzene service. We inspected the roof seals on all 7 tanks and the results of our inspections were:

<u>TANK #</u>	<u>SEAL CONDITION</u>
619	Good
620	Saw approximately 2 foot area of bad seal, also saw product.
621	Saw approximately 2 foot area of bad seal, also saw product.
622	Saw product around ladder area.
623	Good
624	Good
625	Good

Sun has a contractor who does all leak checks, including leak checks of components in benzene service. According to their records less than 2% of the benzene components leak, and all leaks are fixed within 15 calendar days as required by 40 CFR Part 61.242-7(d). We did a random survey of components in benzene service while we were there, using a GSA LEL detector. We checked 50 random components and found no leaks. So it appears that Sun is doing a good job with their benzene leak detection program. We also saw several tags indicating repairs had been made to benzene components which had been found leaking.

#### 4.2 GASOLINE STORAGE TANKS

In accordance with PA DER regulation 129.56, we inspected the internal floating roof seals on 8 gasoline storage tanks at Suns #2 Tank Farm. Our findings are summarized below:

<u>TANK#</u>	<u>SEAL CONDITION</u>
316	Bad seal around ladder; rim seal is deteriorating.
317	Product level was too low to allow inspection.
320	Seal in good condition.
324	Seal in good condition.
325	Product was visible around ladder.
327(external floating roof)	Seal in good condition.
328	Product level too low couldn't inspect.
331	Product was visible around ladder.
333	Could only see one-third of seal; the part I saw was in good condition.

Sun has no program to inspect the internal floating roofs of these tanks, as required by PA regulation 129.56(f), because of their employee safety policy. Tanks are only inspected when they are cleaned or refurbished. Internal seals are difficult to thoroughly inspect due to the lack of roof vents to let in sunlight. However, if the roof is inspected on a sunny day with a small hand held mirror, to provide the necessary light, the entire internal roof should be visible.

#### 4.3 PARTICULATE EMISSION SOURCES

We inspected the Fluid Catalytic Cracking Unit(FCCU) which is the major source of particulate emissions in the plant. Details of this process can be found in my inspection report of January 16, 1990. We observed no visible emissions coming off either the main or bypass stacks while we were there. Sun recently had a stack test to determine whether they meet DER's grain loading standard with the lower half of their electrostatic turned off. The report is expected soon but Sun officials told me that the planned to fix the ESP unit regardless of what the report showed.

We also inspected the 15-1 boiler house where all the steam is made for the plant. On Thursday morning we observed an opacity of 20-25% coming out of the process stack for these boilers.

#### 4.3 PARTICULATE EMISSION SOURCES(cont.)

Mr Meritt explained that this was a rare occurrence which sometimes happened when the plant had to generate large amounts of steam. The opacity from this stack soon went to 0%. There 6 boilers which burn natural gas, refinery fuel gas (high viscosity oil), and number 6 fuel oil. There smoke indicators and combustibles indicators on each boiler. If the smoke goes above a certain opacity an alarm goes off in the control house and the air intake is adjusted to reduce the opacity. Sulfur Dioxide (SO<sub>2</sub>) samples are taken every morning. The sulfur content of the combustibles is limited to 0.6 lb per million BTU, but the sulfur content is usually around 0.3 lb/MMBTU.

#### 4.4 VOC LEAK CHECK AND NSPS INSPECTION

We inspected Plant 12 which contains a crude oil distillation unit which is subject to NSPS requirements (Subpart J). In this area The crude oil is heated to boiling and the long chain hydrocarbons go out the bottom and the lighter fractions come off the top. There is a desulfurizer on this unit which removes the sulfur from the crude and converts it to H<sub>2</sub>S and sends it to the gas plant. Sun has two Combustion Engineering hydrogen sulfide (H<sub>2</sub>S) analyzers which have not yet been certified. These two analyzers have met the low range calibration but have not yet met the mid to high range calibration standard.

We next performed a VOC leak check survey using the GSA LEL meter. We did a random check of 40 components in VOC service and did not find a leak. Nine of the components we checked had tags on them which indicated that they had been leaking and were repaired.

We also did a leak check at the Ethylene plant which has the largest number of components in VOC service of any part of the refinery. Environmental Control Services is the contractor employed by Sun to handle their leak detection and repair program. We reviewed their 1989 report and found that less than 2% of the components in VOC service leaked during 1989. We did a random leak survey of 103 components and found 8 which were leaking ( 7.77%). This is much higher than ECS's 1989 report indicated. We informed Sun of our finding and they said they would have the entire area checked. there approximately 1,700 components in VOC service in the Ethylene plant.

#### 4.5 SULFUR EMISSION SOURCES

There are five areas which have possible sulfur emissions. Four of these areas handle the crude oil which normally contains around 0.2% sulfur. These areas are the FCCU and the 3 crude units. The FCCU unit has an SO<sub>2</sub> meter which takes readings every 10 minutes. The SO<sub>2</sub> content out the FCCU stack is limited to 450 Parts per Million (PPM) by DER. The sulfur from the crude units is removed by a desulfurizer and sent to the Ethylene complex. At the Ethylene complex the incoming gases are compressed to 400 psi and sent to the MEA absorber to absorb SO<sub>2</sub>. The SO<sub>2</sub> comes off of the bottom of the distillation column and is heated in a heat exchanger. The pressure of the gas stream is reduced to 15 psi in a Stripping column and a 50-50 stream of MEA and H<sub>2</sub>S comes off the top. The MEA drops out into a knockout drum and the H<sub>2</sub>S is sent to nearby General Chemical by pipeline. General Chemical uses this H<sub>2</sub>S to make Sulfuric Acid.

This area was in good condition and we saw no leaking pipes nor did we detect any sulfur odors in the area. There are no point in this complex where sulfur could be emitted. The only SO<sub>2</sub> emission point in the plant is at the FCCU unit where it is continuously monitored.

#### 5. MISCELLANEOUS

Sun has been experiencing problems with the Marcus Hook community and the nearby Marcus Hook Elementary School in particular. Several incidents of foul odors in the school and community have been blamed on Sun. Sun officials have not been able to find any reason for these odors and are considering bringing in a third party to investigate. We did not notice any foul odors during our inspection. The Marcus Hook Elementary School has had their ventilation system examined and cleaned but the incidents have not stopped. PA DER has an inspector driving around the refinery/school area several times a day but the source of these odors has not been found. Also more details on plant operations can be found in NEIC's 1988 inspection report on this facility.

#### 6. CONCLUSIONS

With the possible exception of the Benzene and Gasoline storage tank roof seals and the FCCU ESP unit, Sun is in compliance with all applicable Federal and State regulations.

*See*

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
841 Chestnut Building  
Philadelphia, Pennsylvania 19107

SUBJECT: Submittal of Inspection Reports

DATE: March 28, 1990

FROM: Charles Kanetsky, Acting Chief *WJL*  
Philadelphia Operations Section(3ES11)

TO: Bernard Turlinski, Chief  
Air Enforcement Branch(3AM20)

Attached is an Inspection Report from the following facility:

<u>Facility</u>	<u>CDS number</u>	<u>AE Contact</u>
Sun Oil Refining & Marketing	39-2360-00026	Jeanine Kubli

If you have any questions please call me.

Attachments

**RECEIVED**  
MAR 29 1990  
Enforcement Policy &  
State Coordination Section



A156

310

U. S. Environmental Protection Agency  
Environmental Services Division  
EPA, Region III

COMPLIANCE INSPECTION REPORT

1. GENERAL INFORMATION

Company Name: Sun Refining and Marketing  
Address: Lower Chichester/ Marcus Hook, PA

CDS# 39-2360-00026  
Form of Ownership: Corporate  
Company Phone Number 215-447-1198  
Company Personnel/Title Steve Martini, Risk Manager  
Laura Grossi-Tyson, Legal Michael Hennigan, Sun Operations  
Jeff Peters, Public Relations Barry Morlock, Maintenance  
Art Meritt, Environmental Consultant  
State Personnel/Title Neil O'Connor, Pa DER  
EPA Personnel/Title Mike Giuranna & Jim Gouvas ESD, POS  
Jeannine Kubli, AMD, AEB

Date of Inspection 1/16/90 Arrival 10:00AM Depart 1:00 PM

2. SPECIFIC INFORMATION

Type of Facility Oil Refinery

Daily Production: Days/Week 7 Hours/Day 24 Shifts/Day 3  
Rated Production Rate/Day \_\_\_\_\_  
Actual Production Rate/Day \_\_\_\_\_  
Number of Employees \_\_\_\_\_

3. REASON FOR INSPECTION

On August 20, 1989 at approximately 1:30pm Sun had to switch from venting out their concrete stack, which has an electrostatic precipitator, to a metal bypass stack, with no control equipment for 10 days. During this period the exhaust from this uncontrolled stack caused damage to cars parked in the vicinity. The damage came from catalyst(aluminum silicate) which had built up in the stack and from refractory material which had been blown out from the deterioration of the inner shell of the stack. Mr. Peters informed us that Sun had paid out 1 million dollars in about 550 claims, all for paint damage to cars. The money was used for anything from washing the car to a complete paint job which often required the car to be stripped down to the bare metal before painting.

#### 4. DESCRIPTION OF PROCESS

Crude Oil is sent into the Fluid Catalytic Cracking Unit(FCCU) where it reacts with the aluminum silicate catalyst and then sent to the fractionating tower to be separated into short and long chain hydrocarbons. The catalyst used in the reaction is sent to the regenerator where it reacts with air to clean the carbon off the particles and then sent back to be used in the FCCU. Once the catalyst is spent and cannot be regenerated it is sent through the Expander then sent with the other flue gases through the Carbon Monoxide Boiler and then through an Electrostatic Precipitator, to remove particulate and then vented through an approximately 200 feet high stack. This stack is equipped with a Dynatron Continuous Emissions Monitor(CEM).

If there are any problems with the CO Boiler a valve can be opened which will send the flue gas and spent catalyst out a bypass stack. However, this stack does not contain any pollution control equipment. The CO Boiler and the expander are used to recover energy to use in other parts of the plant. A crude drawing of the process is pictured on the following page.

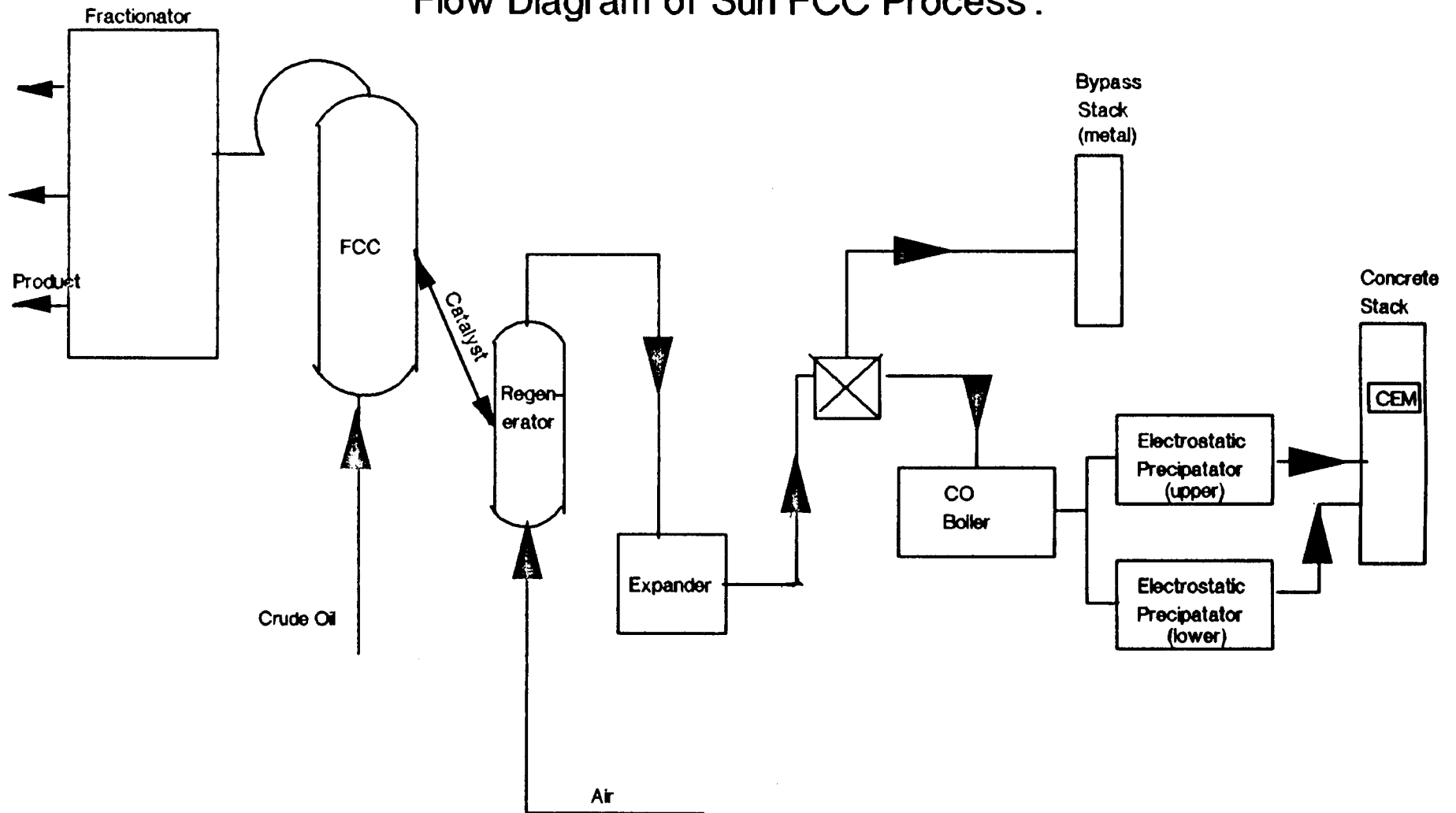
#### 5. MEETING WITH SUN OFFICIALS

Sun was forced to vent the gas from the process to the bypass stack as a result of discovering several tube leaks in the CO Boiler which forced them to shut down the boiler for repairs. This has been done before and there have been minor incidents resulting from buildup of catalyst in the line leading to the bypass stack. However this time Sun believes that the deterioration of the inside of the bypass stack caused a great deal of refractory material to be emitted along with the regular flue gas and this resulted in the damage to the cars in the vicinity of the plant. As a result of this incident Sun has completely rebuilt the inside of this stack, something which has not been done since the stack was built in the 1960's. Also to minimize damage to the inside of this stack from thermal shock(a large, sudden rise in temperature), Sun has instructed its operators to open the valve to the bypass stack as slowly as possible to insure a slower rise in temperature. Also Sun has inserted a blank in the ductwork leading to the bypass stack and is now able to inspect the inside of the stack so it will now be aware of the condition of the stack and what type of material is in it before they would use it.

Sun plans to shut down the entire FCC unit in the fall for a full inspection of the process. Also they have a consultant come in once a year to check out the ESP, and the CEM is calibrated regularly.

The Pennsylvania DER has fined Sun \$10,000 for this incident.

Flow Diagram of Sun FCC Process .



## 6. INSPECTION OF FCC UNIT

Art Meritt and Mike Hennigan then took us on an inspection of the FCC unit. We inspected the control room for the FCC process, the controls for the ESP, the CEM, and the area around the unit. The CEM appeared to be in good working order and was reading between 5-10% opacity, which we confirmed by observation of the main stack. The upper chamber of the ESP was on but the lower chamber was not receiving any power and hasn't been electrified since last August. It is scheduled to be repaired in October 1990 and until then the flue gas going through the lower precipitator is cleaned only by the series of baffles in the lower precipitator.

## 7. DISCUSSION

The rebuilding of the inside of the bypass stack and the ability of Sun to now inspect it should prevent a reoccurrence of an incident like the one last August. However, since the lower ESP is not powered Sun could be in violation of PA regulation 123.13(c)(1)(ii). This regulation requires that no one can permit the emission of particulate matter into the atmosphere from any process in 123.13(b)(1) (which includes Petroleum Refining (catalytic cracking) that exceeds the rate determined by the formula  $A = 600/E$ . Where A are allowable emissions in grains per dry standard cubic feet and E is effluent gas volume in dry standard cubic feet per minute. Using the 1987 data from a stack test done by AirNova Inc. E is 287,007 dscfm which makes the allowable emissions 0.021 gr/dscf. According to the stack test the emissions ranged from 0.014 to 0.021 gr/dscf with the ESP in full operation and from 0.038 to 0.075 gr/dscf with the ESP inoperative. If you interpolate this could mean that the emissions range from 0.026 to 0.048 gr/dscf with one of the two ESP chambers operative.

## 8. CONCLUSION

Future incidents of the type which occurred in August of 1988, should not be repeated. However Sun is probably in violation of PA regulation 123.13(c)(1)(ii). Their true emissions, with 1 of the 2 precipitator chambers operative, will be determined by the stack test scheduled to be done to the ESP, in its present operating condition, by the end of February 1990.

**§ 123.12. Incinerators.**

No person shall cause, suffer, or permit the emission to the outdoor atmosphere of particulate matter from any incinerator, at any time, in such a manner that the particulate matter concentration in the effluent gas exceeds 0.1 grains per dry standard cubic foot, corrected to 12% carbon dioxide.

**§ 123.13. Processes.**

(a) The provisions of subsections (b) and (c) shall apply to all processes except combustion units and incinerators.

(b) No person shall cause, suffer, or permit the emission into the outdoor atmosphere of particulate matter from any process listed in the following table, at any time, either in excess of the rate calculated by the formula set forth in paragraph (2) or in such a manner that the concentration of particulate matter in the effluent gas exceeds 0.02 grains per dry standard cubic foot, whichever is greater:

(1) *Table.*

Process	Process Factor, F (in pounds per ton)
Carbon black manufacturing	500 (product)
Charcoal manufacturing	400 (product)
Paint manufacturing	0.05 (pigment handled)
Phosphoric acid manufacturing	6.0 ( $P_2O_5$ produced)
Detergent drying	30 (product)
Alfalfa dehydration	30 (product)
Grain elevators	
/loading or unloading	90 (grain)
Grain screening and cleaning	300 (grain)
Grain drying	200 (product)
Meat smoking	0.01 (meat)
Ammonium nitrate manufacturing	
/granulator	0.1 (product)
Ferroalloy production furnace	0.3 (product)
Primary iron and/or steel making:	
Iron production	100 (product)
Sintering—windbox	20 (dry solids feed)
Steel production	40 (product)
Scarfig	20 (product)
Primary lead production:	
Roasting	0.004 (ore feed)
Sintering—windbox	0.2 (sinter)
Lead reduction	0.5 (product)
Primary zinc production:	
Roasting	3 (ore feed)
Sintering—windbox	2 (product)
Zinc reduction	10 (product)
Secondary aluminum production:	
Sweating	50 (aluminum product)
Melting and refining	10 (aluminum feed)

Brass and bronze production (melting and refining)	20 (product)
Iron foundry:	
Melting:	
Five tons per hour and less	150 (iron)
More than five tons per hour	50 (iron)
Sand handling	20 (sand)
Shake-out	20 (sand)
Secondary lead smelting	0.5 (product)
Secondary magnesium smelting	0.2 (product)
Secondary zinc smelting:	
Sweating	0.01 (product)
Refining	0.3 (product)
Asphaltic concrete production	6 (aggregate feed)
Asphalt roofing manufacturing: (felt saturation)	0.6 (asphalt used)
Portland cement manufacturing:	
Clinker production	150 (dry solids feed)
Clinker cooling	50 (product)
Coal dry-cleaning	2 (product)
Lime calcining	200 (product)
Petroleum refining (catalytic cracking)	40 (liquid feed)
Pressed, blown, and spun glass; glass production melting furnaces	50 (Fill)
Sole heated nonrecovery coke oven	20 (coal charged/oven)
By-product coke production: pushing operation	1 (coke pushed)

(2) *Formula.*

$A = 0.76E^{0.42}$ , where:

A = Allowable emissions in pounds per hour.

E = Emission index = F x W pounds per hour.

F = Process factor in pounds per unit, and

W = Production or charging rate in units per hour.

The factor F shall be obtained from the table in paragraph (1) of this subsection. The units for F and W shall be compatible.

(3) *Allowable emissions.* Allowable emissions under this subsection are graphically indicated in Appendix B to this Chapter.

(c) For processes not listed in subsection (b)(1) of this section, including but not limited to coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) *Prohibited emissions.* No person shall cause, suffer, or permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) of this section in such a manner that the concentration of particulate matter in the effluent gas, at any time, exceeds any of the following:

(i) 0.04 grains per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) The rate determined by the formula:

$A = 6000E^{-1}$ , where:

A = Allowable emissions in grains per dry standard cubic foot, and

E = Effluent gas volume in dry standard cubic feet per minute,

when E is equal to or greater than 150,000 but less than 300,000.

(iii) 0.02 grains per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute.

(2) Allowable emissions. Allowable emissions under this subsection are graphically indicated in Appendix C to this chapter.

Source

The provisions of section 123.13 amended September 16, 1980, effective September 27, 1980, 10 Pa. B. 3788.

## SULFUR COMPOUND EMISSIONS

### § 123.21. General.

(a) This section shall apply to all sources except those subject to other provisions of this Article, with respect to the control of sulfur compound emissions.

(b) No person shall cause, suffer, or permit the emission into the outdoor atmosphere of sulfur oxides, from any source, in such a manner that the concentration, at any time, of the sulfur oxides, expressed as  $SO_2$ , in the effluent gas exceeds 500 parts per million, by volume (dry basis).

### § 123.22. Combustion units.

(a) *Non-air basin areas.*

(1) *General provision.* No person shall cause, suffer, or permit the emission into the outdoor atmosphere of sulfur oxides, expressed as  $SO_2$ , from any combustion unit, at any time, in excess of the rate of four pounds per million B.t.u. of heat input over any one-hour period except as provided for in paragraph (4) of this subsection.

(2) *Commercial fuel oil.* No person shall, at any time, offer for sale, deliver for use, exchange in trade, cause the use of, suffer the use of, or permit the use of commercial fuel oil in non-air basin areas which contains sulfur in excess of the applicable percentage by weight set forth in the following table:

<i>Grades Commercial Fuel Oil</i>	<i>% Sulfur</i>
No. 2 and lighter (viscosity less than or equal to 5.820cSt)	0.5
No. 4, No. 5, No. 6, and heavier (viscosity greater than 5.82cSt)	2.8

STEVE MARTINI	SUN RISK MANAGER	447-1176
Jeanine Kubli	EPA environmental	597-9839
VIM GOLLINS	EPA	597-1194
MIKE GIURANNA	EPA	597-8336
LAURA GROSSI-TYSON	SUN R+M LEGAL (215)	977-6235
MICHAEL HENNIGAN	SUN OPERATIONS (215)	447-1212
JEFF PETERS	SUN R+M Public Relations	" " 1009
BARRY MORLOCK	" " Maintenance Dept	" - 1462
Int. Mgmt.	" Environmental	447-1198
Neil Connor	DER-Pa AIR Quality	270-1920



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION III

841 Chestnut Building  
Philadelphia, Pennsylvania 19107

SUBJECT: Submittal of Inspection Reports

DATE: JAN 30 1990

FROM: Victor Guide, Chief *M.G. FOR*  
Philadelphia Operations Section(3ES11)

TO: Bernard Turlinski, Chief  
Air Enforcement Branch(3AM20)

Attached is an Inspection Report from the following facility:

<u>Facility</u>	<u>CDS number</u>	<u>AE Contact</u>
Sun Oil Refining & Marketing	39-2360-00026	Jeanine Kubli

If you have any questions please call me.

RECEIVED

JAN 31 1990

AIR ENFORCEMENT BRANCH  
EPA Region III

RECEIVED

FEB 07 1990

AIR ENFORCEMENT BRANCH  
EPA Region III

# Sykes & Sons, Inc.

2827 W. Third Street

Chester, Pennsylvania 19013

Subject: INSPECTION AND STATUS REPORT

Date: January 16, 1990

From: R.J. Sykes, Jr.

To: Howard Nickle

Location: Marcus Hook, PA

Date of Inspection: January 12, 1990

Item No. 316  
In-service Inspection

## 1. GENERAL

- a. Tank is a covered floating roof type.
- b. Tank is of all welded construction.
- c. Nominal diameter of tank: 110'-0"  
Nominal height of tank: 48'-0"
- d. Tank does have an API standard 650 name plate.
- e. Tank was built in 1976 by Fisher Tank Co.

## 2. SHELL AND SHELL CONNECTIONS

- a. Paint is in poor condition. Stencil: 9/80
- b. Tank shell is six rings high. Readings (taken at steps with paint intact) are as follows:

1st bottom	.740	4th	.340
2nd	.625	5th	.285
3rd	.495	6th	.260
- c. There is product showing on the 6" gate valve stem. (S.W. side of tank).
- d. First shell ring connections are as follows:
  - 1 -36" round manhole
  - 1 -12" connection/blind flanged.
  - 1 10" thermal relief showing sign of product.
  - 1 -6" stripper, valve stem showing product.No bonding cable on above 10" and 6" connections.
  - 1 -3/4" electric temperature probe connection.
  - 2 -24" round manhole.
  - 1 -10" connection, gate valve, blind flanged.
  - 1 -6" foam connection.
  - 1 -6" stripper.
  - 1 -14" connection.
- e. There is no manual read temperature probe.
- f. There is a build up of soil and stone on the outer bottom sketch plates, and shell

### 3. STAIRS, LADDERS, PLATFORMS

- a. Grating on top platform, cone roof level, needs to be fastened down with clips. All other items appear in good condition.

### 4. FIREWALL AND FIREWALL AREA

- a. Area is well maintained.
- b. Area is of soil and stone construction.
- c. There is one tank in area.
- d. Drainage away from tank appears good.

### 5. CONE ROOF

- a. Readings: .180 min. - .215 max.
- b. Paint is in poor condition.
- c. Roof connections:
  - 1 -4" welded high level alarm.
  - 3 -Welded 3" connections. Pipe has threaded cap.
  - 3 -20" manholes.
  - 1 -24" center free vent.
  - 1 -Target gauge connection.
  - 1 -Data gauge connection.
- d. Slope on roof is good for water drainage.

### 6. FLOATING ROOF

- a. Roof is a bolt together aluminum type, with no topside pontoons.
- b. Roof support legs are pinned at high level. Two roof support leg pins were missing. (3/8" aluminum bolt by 3" long).
- c. Roof has a single foam seal.
- d. There is a buckle on the roof with some bolts missing.
- e. Two areas show product on the topside of deck. One area is ripped at the vertical ladder.
- f. Seal has debris (scale and rust) on it. At some areas, the seal shows signs of dry rot.

Subject BENZENE STORAGE REGULATIONS

Interoffice  
Correspondence

Date January 21, 1990

Location Marcus Hook

From A. D. Meritt

To H. Nickle

The following tanks over 10,000 gallons have been registered with EPA as benzene storage tanks for the Marcus Hook Refinery. These tanks are now the only tanks over 10,000 gallons in which we may store benzene. Tanks numbers 619, 620, 621, 622, 623, 624 and 625.

These tanks all have internal floating roofs and liquid mounted seals.

Inspection Requirements

- 1) Visually look at floating roof and seals once every 12 months through manholes and hatches in fixed roof.
- 2) Visually look at floating roof, seals gaskets, etc. close-up every 10 years with the tank empty. EPA must be notified 30 days in advance of this inspection. Unplanned inspections (following unplanned repairs) only require 7 days notice.

Reporting - will be done by Environmental.

- 3) Each annual inspection requires a report to be made to EPA describing the condition of the tank elements and necessary repairs. Forward information to Environmental.
- 4) Each 10 year inspection requires a report to EPA. Forward information to Environmental.

Records

- 5) All reports to EPA of inspections and maintenance.
- 6) All tanks, regardless of size, containing benzene require a record of dimensions and capacities.

RECEIVED

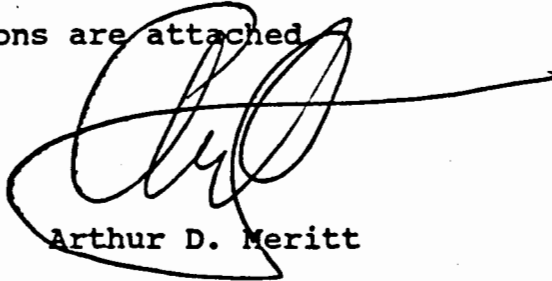
APR 27 1990

ENFORCEMENT BRANCH  
Region III

Page 2

All openings in floating roof shall adhere to paragraph (5) on page 38078. Basically this means that any opening must have some kind of fabric seal or gasketed cover. We have 9 years or the first 10 year inspection to meet these requirements, whichever is first.

Detailed regulations are attached

A large, stylized handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

Arthur D. Meritt

ADM:erg

Attachment

cc: L. Grossi-Tyson

S. Martini

A. Vanacore

J. Rossi

H. Meixner

D. Rocklage

File: Benzene Neshap Report

ADM-HN22

# Sykes & Sons, Inc.

2827 W. Third Street

Chester, Pennsylvania 19013

Various Data  
027

Subject: **Tank** INSPECTION AND STATUS REPORT

Date: January 15, 1990

From: R.J. Sykes, Jr.

To: Howard Nickle

Sun Oil

Location: Marcus Hook, PA

Date of Inspection: January 12, 1990

Item No. 325

In-service Inspection

## 1. GENERAL

- Tank does not have a number painted on shell.
- Age and manufacturer of tank was unknown at time of inspection.
- Nominal diameter: 120'-0".  
Nominal height: 58'-5".
- Tank is a covered floating roof type.
- Tank is of all welded construction.

## 2. SHELL AND SHELL CONNECTIONS

- Shell connections are as follows:
  - 3 -24" round manheads.
  - 1 -36" round manhead.
  - 3 -4" flanged connections-gate valve/blind flange.
  - 1 -1½" electric temperature probe connection.
  - 1 -1½" connection on 45° angle and valve is plugged.
  - 1 -8" low level suction.
  - 1 -14" connection used as both fill and suction.
  - 1 -4" welded connection. Gate valve and blind flanged-no reinforcing pad.
  - 1 -6" water draw off connection. Bonding cable is intact on the fill and suction line. Tank shell is 7 rings high. Readings are as follows: (taken at stairs with paint intact)

1st bottom	1.045	4th	.560	7th	.280
2nd	.845	5th	.385		
3rd	.690	6th	.320		
- Temperature probe and data gauge appear new.
- Electric high level alarm appears new.
- There are no emergency overflow vents on top shell ring.
- Paint is in good condition.
- There is sand build up on outer sketch plates and shell.
- Tank does not have a manual read temperature probe.

## 3. FIREWALL AND FIREWALL AREA

- a. Area is well maintained.
- b. Area is of stone and soil construction.
- c. Lines are above ground, except where they meet the firewall.
- d. There is one tank in the firewall area.
- e. Drainage away from tank appears good.

## 4. STEEL CONE ROOF

- a. Thickness readings (6 taken) are: .195 min. - .205 max.
- b. Paint is in good condition.
- c. Roof has good slope for water drainage, with no apparent low areas. (Water traps).
- d. Roof connections are as follows:
  - 1 -electric high level alarm.
  - 1 -24" center free vent.
  - 4 -20" round manholes. One used for data gauge.
  - 1 -36" round manhole (vertical ladder access) hinged.

## 5. FLOATING ROOF

- a. Single deck, single seal type. (Pan type floater). o
- b. Much product and water on top of roof. Up to 2" deep-180" across from ladder.
- c. Seals at roof columns failed. Foam seal at shell shows dry rot.
- d. Outer pontoons show product and water.
- e. No bonding cable from floating roof to shell.
- f. No emergency overflow vents at top and side shell.
- g. Two manhole access covers were not in place.
- h. Thickness readings: .185 min. - .195 max.
- i. There is no safety belt device on the vertical ladder.

## 6. STAIRS, RAILINGS, PLATFORMS

- a. A few stair treads are bent. All appear in good condition.
- b. Paint is in good condition.

## RECOMMENDATIONS

1. Tank should be taken from service and have roof repaired.
2. Side shell vents, at present design, may allow water in, if there is a strong wind. Water proof vent covers.
3. Install bonding cable on floating roof.
4. Paint tank number on the side shell.
5. Install emergency overflows on top shell ring.
6. Install new roof seals.
7. 4" connection (over fill and suction line) should have a reinforcing pad.



**ENSR**

*LSC TRANSFORMER*

Formerly Sunohio

ENSR Operations  
1501 Raff Rd. S.W.  
Canton, Ohio 44710  
216-477-3474

November 8, 1989

**CONFIDENTIAL**

Mr. Tom Knight  
Sun Refining and Marketing Co.  
P.O. Box 426  
Marcus Hook, PA 19061

Dear Mr. Knight:

We are tracking the leaching of your transformer until the reclassifiable levels required by the EPA have been attained. Once the PCB leaching rate has been reduced to acceptable levels, the system is turned off and the 90-day EPA reclassification period begins. You will receive this report within 48 hours from the time we receive the results from the lab.

Thank you for using System 50 reclassification service. If you have any questions, please call your Project Engineer.

Sincerely,

ENSR OPERATIONS

*Jan Dickler*

Project Engineer  
System 50

ad

Enclosure

cc: Rick Gorski

000239



## CHEMICAL ANALYSIS REPORT

Formerly Sunohio

ENSR Operations  
1700 Gateway Boulevard S.E.  
Canton, Ohio 44707  
216-452-0837

# CONFIDENTIAL

SUN REFINING  
PO BOX 426  
MARCUS HOOK , PA 19061

DATE: November 06, 1989  
ATTN: MR. TOM KNIGHT

CUSTOMER NUMBER: 350057  
UNIT NUMBER:  
SERIAL NUMBER: 21079A01  
PROC. NO: 12-149-0320-020389

GALLONS: 305  
LOCATION:  
STATUS: Processor Installed  
PROC. STARTUP: 03/04/89

Fluid	Sample Date	PCB Conc.	ACLR	Status
ASK	03/03/89	940,000.00	1254	A
SYS	03/03/89	7,370.00	1254	B
SYS	05/16/89	2.40	1254	C
SYS	08/25/89	1.07	1254	C

CERTIFIED BY:

*R. J. Libas*  
Residue Analyst

APPROVED BY:

*Jan Deckh*  
Project Manager

000240

ALL SAMPLES WILL BE DISPOSED OF AFTER SIXTY DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

Neil - copy 1<sup>st</sup> pg.  
File 23-000-133

304

REGION NORTH STON  
DISTRICT Del-Ches  
AP FILE NO. 23-000-133

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF AIR QUALITY CONTROL  
SEMI-ANNUAL  
INSPECTION VERIFICATION REPORT  
FOR MAJOR FACILITIES

COMPANY NAME SUN Refinery DATE INSPECTED October 31, 1989  
OWNERS NAME SUN Co INSPECTED BY N. O'CONNOR  
LOCATION MARCUS Hook, DelCo REVIEWED BY RLR  
NEXT INSPECTION DATE \_\_\_\_\_  
OFFICIAL(S) CONTACTED Art. Meritt TITLE ENVIR. ENGINEER  
DAVE Todd Testing CONSULTANT

NONCOMPLYING SOURCES (use back if necessary) STANDARD(S) VIOLATED  
Electrostatic Ppt. FCC unit Annex, §123.13, (Probably) §127.25  
UDex-Benzene Area {odor: Thick Smog, odor: Vol. Air. Samp. §121.7/§123.1(a)/section 8 + Act (over)

SOURCES NOT OPERATING (use back if necessary) REASON(S) (no production, malfunction, breakdown, etc.)  
\_\_\_\_\_

FOLLOW-UP ACTIONS REQUIRED The original FCC by-pass stack has been  
torn down - A new stack is currently being installed with  
an inspection/clean-out Port - allowing entrance. This had been  
the case for the original stack and was probable cause for the  
degree of deterioration before entry. The Boilerhouse AREA; UDex AREA  
TEN Plant AREA, were all visited with a subsequent walk-thru.  
A spot check was made for Benzene BARGE loading,  
Also in passing covered separators; Finally a slow drive-  
thru of the major (other) production systems and loading Ops.

# 30 (innocent until proven guilty!) (\* letter to be sent DER,

## Udex - Benzene

- ① MFT AREA AS BELOW UNDER Refinery
  - ② Storage Area
  - ③ SEPARATION - NO odors detected.
- Tank Storage Area - AND Pump Transfer platform
- Diffuse sweet odor - Moderate - Likely associated with pump sumps but possibly from transfer lines upwind leading to the pumps.

## Reforming - VO1 Accumulator (Purging) (Near 17-2A-77 sump area)

Odors - Suggestive of Naptha  
but with a tinge of  
other non-specific  
sweet odors

Neil O'Gunn

\* By Pauling Aug 12

# Run Oil Inspection

1989

FCC Unit ESP's		AC-V	DC-KV	AC-AMPS	DC-M.
Buell inlet center	N	<div>LATE SUMMER DOWN CORROSION &amp; BLOW BY INVASION OF PARTICULATE into STREAM</div>	<div>NOT IN OPERATION</div>		
" " "	S				
Buell outlet center	N				
" " "	S				
Buell outlet	N				
"	S				
Lodge outlet	N	<div>NOT IN OPERATION</div>			<div>SOOT &amp; SHIM SUPPLY CONTROL VISUAL</div>
" "	S				
Lodge center	N	350	21	50	370
" "	S	430	52	150	340
Lodge inlet	N	330	20	32	130
" "	S	340	51	32	78
Buell inlet	N	<div>NOT IN OPERATION</div>			
" "	S				

SO<sub>2</sub> meter at 10 plant

417 ppm

%S\* { DERIVED  
ALTERNATE

\*Note meter reads 2x real value of %S 0.23 feed IN

Opacity monitor

Model

Installed

Visual opacity 10% time 2:05pm

Fuel Type GAS/oil + Resid. Amount

Alternate fuel Amount

the sources **NO Barges**

102

Benzene Loading Loading yes ☐ Emission ~~NONE~~ ~~spec~~  
None

Comments:

**Out of Operation**

103 Herculesoff Furnace fuel ~~Opacity~~ Amt

Comments:

DISCONTINUED - Deleted

104 12 Plant share ~~use~~ ☒ fuel 15% Opacity  
No ☐ Amt

Comments:

105 10 plant share fuel 15% Opacity  
Amt

Comments:

10/31/59

	7 AM	11AM	3PM	7PM	11PM	3AM	7AM	
#1 Boiler	62	61	61					15 Boiler House Date:
#2 Boiler	66	65	65					
#3 Boiler	58	56	56					
#4 Boiler	510							
#5 Boiler	88	85	85					
#6 Boiler	120	114	114					
#7 Boiler	215	205	205					
Cogen								
Total Steam	224	223	223					
M#/hr	833	809	809	1				
#1 Boiler	67	70	70					Total Gas
#2 Boiler	65	65	65					
#3 Boiler	86	83	83					
#4 boiler	510							Total B.C.
#5 Boiler	114	117	117					
#6 Boiler	123	87	87					
#7 Boiler	372	296	296					
Cogen								
Total Gas								
MISCFH	777	718	718					
#1 Boiler								458 Tk Level  Pressure E. W.
#2 Boiler								
#3 Boiler								
#4 Boiler								
#5 Boiler								
#6 Boiler								
#7 Boiler								
Total Hi-Vis								
GPH								
#1 Boiler								1 copy to Yield 1 copy to Office
#2 Boiler								
#3 Boiler								
#4 Boiler								
#5 Boiler								
#6 Boiler	150	150	150					
#7 Boiler								
Total B.C.								

(222M lbs of steam/hr) (71,000#/hr to turbine) S.O.  
 230,000 ft<sup>3</sup> NAT GAS + 659,000 ft<sup>3</sup> H<sub>2</sub> (80%)

various dates

(151)

Department of Environmental Resources		NPDES Compliance Inspection Report				Bureau of Water Quality Management	
Section A: National Data System Coding							
Transaction Code	NPDES	Yr/Mo/Day	Inspection Type	Inspector	Fac Type		
1 <u>N</u> 2 <u>5</u> 3 <u>P</u> <u>A</u> <u>0</u> <u>0</u> <u>1</u> <u>1</u> <u>0</u> <u>4</u> <u>6</u> 11		12 <u>8</u> <u>9</u> <u>0</u> <u>9</u> <u>2</u> <u>8</u> 17	18 <u>R</u>	19 <u>5</u>	20 <u>2</u>		
Section B: Facility Data							
Name and Location of Facility Inspected			Entry Time/Date	Permit Effective Date			
<u>Dean Manufacturing and Engineering Company</u>			<u>0930 9-28-89</u>	<u>6-25-86</u>			
<u>P.O. Box 426 Marcus Hook PA 19061</u>			Exit Time/Date	Permit Expiration Date			
Municipality <u>Marcus Hook</u> County <u>Delaware</u>			<u>1200 9-28-89</u>	<u>6-25-91</u>			
Name, Address of Responsible Official			Title				
<u>William E. Flint</u>			<u>Refinery Manager</u>				
			Telephone		Contacted		
			<u>447-1500</u>		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Section C: Areas Evaluated During Inspection							
(S = Satisfactory, I = Improvement Needed, U = Unsatisfactory, D = Does Not Apply, Blank = Not Evaluated)							
_____ Permit Verification	_____ Flow Measurement	<u>S</u>		Effluent/Receiving Waters			
_____ Compliance Schedule	_____ Laboratory/QA	<u>S</u>		Operation/Maintenance			
_____ Records/Reports	_____ Self-Monitoring Program			Pretreatment			
_____ Other (Specify): _____							
Section D: Summary of Violations/Recommendations/Comments (Attach additional sheets if necessary)							
<p>A NPDES inspection was conducted today. Sunny &amp; real nice. 2 sub samples from discharge 201 and 301 were collected, as well as from the river intake.</p> <p>The Delaware River was examined and no slicks were evident at any of the docks. Dock 2A looks OK, groundwater recovery is still in progress; ~45,000 gallons of product have been collected so far. There is a 14 inch wide line at the beginning of dock 2A that has heavy staining &amp; some free product on a small pool of water. Jim is aware of the problem. It should be cleaned up.</p>							
Inspector Name		Inspector Signature		Title		Date	
<u>Richard Breitenstein</u>		<u>Richard Breitenstein</u>		<u>WQS</u>		<u>9-28-89</u>	
Name of Person Interviewed		Signature of Person Interviewed		Title		Date	
<u>Judy S Brackin</u>		<u>Judy S Brackin</u>		<u>Sr Environmental Engineer</u>		<u>9/28/89</u>	
						Telephone <u>447-1959</u>	
THIS DOCUMENT IS OFFICIAL NOTIFICATION THAT A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF WATER QUALITY MANAGEMENT, INSPECTED THE ABOVE FACILITY. THE FINDINGS OF THIS INSPECTION ARE SHOWN ABOVE AND ON ANY ATTACHED PAGES.							
ANY VIOLATIONS WHICH WERE UNCOVERED DURING THE INSPECTION ARE INDICATED. VIOLATIONS MAY ALSO BE DISCOVERED UPON EXAMINATION OF THE RESULTS OF LABORATORY ANALYSES OF THE DISCHARGE AND REVIEW OF DEPARTMENT RECORDS. NOTIFICATION WILL BE FORTHCOMING, IF SUCH VIOLATIONS ARE NOTED.							



## Additional Comments

as soon as possible.

Middle Creek after the dam has a skum and scum in the stagnant area. They are sandblasting near the dam today. There are 3 booms directly after the dam. The creek after the Linwood Bypass looks OK with a slight skum + scum area. There are 2 boom in place directly before the straw barrier, 1 absorbent + 1 containment. There is a slight skum getting through the straw barrier but nothing is visible downstream at the avenue 1 bridge in Delaware. One absorbent boom is in place after the straw barrier.

The VOC separators look alright, but the effluent from the Delco final separator is heavily skewed. A boom should be placed to try + remove some of the skum. There is free oil in all of these separators. South Jersey Pollution Control is on site + removing the oil. The separator area was totally flooded last week and may have contributed to the heavy oil. The rock bank in middle creek doesn't have a lot of staining.

Facility is planning to do away with the middle Creek dam and the entire creek upstream. This will take several years to be completed.

Will also install skimmers in final separators.

Facility is planning a meeting in October '89 with Sun, ADIR, U.S. CG, DNREC + any other essential groups to discuss environmental issues at Sun Refinery.

Outfalls 004, 005 + 007 from the tank farms (Road Bay + #2) come back to the Refinery. 006 is not used anymore. 401 is not used anymore either. 501 is at the middle Creek where the Linwood Bypass discharges.

Permit No.: PA 0011096

Date: 9-28-89

Department of Environmental Resources	<b>NPDES Compliance Inspection Report</b>	Bureau of Water Quality Management
<b>Section A: National Data System Coding</b>		
Transaction Code 1 <u>N</u> 2 <u>5</u> 3 <u>P</u> <u>A</u> <u>0</u> <u>0</u> <u>1</u> <u>1</u> <u>0</u> <u>9</u> <u>6</u> 11	NPDES 12 <u>8</u> <u>9</u> <u>0</u> <u>6</u> <u>2</u> <u>8</u> 17	Yr/Mo/Day 18 <u>C</u> 19 <u>5</u> 20 <u>2</u>
<b>Section B: Facility Data</b>		
Name and Location of Facility Inspected <u>Sun Marketing and Refining Company</u> <u>P.O. Box 426 Marcus Hook PA 19061</u>		Entry Time/Date <u>0950 6-28-89</u>
Municipality <u>Marcus Hook</u> County <u>Delaware</u>		Permit Effective Date <u>6-25-86</u>
Name, Address of Responsible Official <u>Malcolm Flint</u>		Exit Time/Date <u>1445 6-28-89</u>
Title <u>Refinery Manager</u>		Permit Expiration Date <u>6-25-91</u>
Telephone <u>447-1000</u>		Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Section C: Areas Evaluated During Inspection</b>		
(S = Satisfactory, I = Improvement Needed, U = Unsatisfactory, D = Does Not Apply, Blank = Not Evaluated)		
<u>S</u> Permit Verification	<u>S</u> Flow Measurement	<u>S</u> Effluent/Receiving Waters
<u>S</u> Compliance Schedule	<u>S</u> Laboratory/QA	<u>S</u> Operation/Maintenance
<u>I</u> Records/Reports	<u>S</u> Self-Monitoring Program	<u>S</u> Pretreatment
Other (Specify): _____		
<b>Section D: Summary of Violations/Recommendations/Comments (Attach additional sheets if necessary)</b>		
<p><u>an NPDES Compliance evaluation was conducted today.</u></p> <p><u>The Presidente Rivera is docked and is boomed.</u></p> <p><u>The shore looks clean at Sun, and the river is free</u></p> <p><u>of oil, except that which is within the booms.</u></p> <p><u>Samples were collected from outfall 201, 301 + the</u></p> <p><u>river intake. The flow meter for 201 is out of service still +</u></p> <p><u>should be fixed.</u></p> <p><u>There is heavy rainbow sheen after Middle Creek</u></p> <p><u>Dam. The banks are also oil stained. The bank will be</u></p>		
Inspector Name <u>Richard Breitenstein</u>	Inspector Signature <u>Richard Breitenstein</u>	Title <u>WAS</u>
Name of Person Interviewed <u>Judy S Brackin</u>	Signature of Person Interviewed <u>Judy S Brackin</u>	Date <u>6-28-89</u>
		Telephone <u>270-184</u>
		Date <u>6-28-89</u>
		Telephone <u>447-1959</u>
<p>THIS DOCUMENT IS OFFICIAL NOTIFICATION THAT A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF WATER QUALITY MANAGEMENT, INSPECTED THE ABOVE FACILITY. THE FINDINGS OF THIS INSPECTION ARE SHOWN ABOVE AND ON ANY ATTACHED PAGES.</p> <p>ANY VIOLATIONS WHICH WERE UNCOVERED DURING THE INSPECTION ARE INDICATED. VIOLATIONS MAY ALSO BE DISCOVERED UPON EXAMINATION OF THE RESULTS OF LABORATORY ANALYSES OF THE DISCHARGE AND REVIEW OF DEPARTMENT RECORDS. NOTIFICATION WILL BE FORTHCOMING, IF SUCH VIOLATIONS ARE NOTED.</p>		

## Additional Comments

replaced soon. Booms are in place after the dam and on either side of the straw barrier. The barrier itself needs to be changed as some sheen is getting through where middle creek enters the Delaware there is a sheen.

The shoreline by the ethylene complex (in Delaware) has some oil on it.

The Delcora effluent has a sheen & could use a boom. The final separator will eventually get skimmers installed. The sewer system by the 17 plant is being worked on to eliminate grading problems.

There is a lot of staining throughout the facility. This should be controlled as best as possible & the worst areas should be cleaned up.

There is a rainbow sheen at the seepage area by #2 Dock. Booms are in place & South Jersey Pollution Control paid it if necessary. Will probably install groundwater wells soon to determine source.

Recovery well is still in use. 38,000 gallons recovered so far.

The Delcora gate valve is now locked at all times.

Permit No.: PA 0011096

Date: 6-28-89

Department of Environmental Resources		<b>NPDES Compliance Inspection Report</b>				Bureau of Water Quality Management	
<b>Section A: National Data System Coding</b>							
Transaction Code		NPDES		Yr/Mo/Day		Inspection Type	
1 <u>N</u>	2 <u>5</u>	3 <u>P</u>	<u>A</u> <u>0</u> <u>0</u> <u>1</u> <u>1</u> <u>0</u> <u>9</u> <u>6</u>	11	12 <u>8</u> <u>9</u> <u>0</u> <u>3</u> <u>2</u> <u>3</u>	17	18 <u>R</u>
				19 <u>S</u>	20 <u>2</u>		
<b>Section B: Facility Data</b>							
Name and Location of Facility Inspected					Entry Time/Date		Permit Effective Date
<u>Sun Refining and Marketing Company</u>					<u>0945 3-23-89</u>		<u>6-25-86</u>
<u>P.O. Box 426 Marcus Hook PA 19061</u>					Exit Time/Date		Permit Expiration Date
Municipality <u>Marcus Hook</u> County <u>Delaware</u>					<u>1230 3-23-89</u>		<u>6-25-91</u>
Name, Address of Responsible Official					Title		
<u>Malcolm Flint</u>					<u>Refinery manager</u>		
					Telephone		Contacted
					<u>447-1000</u>		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<b>Section C: Areas Evaluated During Inspection</b>							
(S = Satisfactory, I = Improvement Needed, U = Unsatisfactory, D = Does Not Apply, Blank = Not Evaluated)							
_____ Permit Verification		_____ Flow Measurement		_____ <u>S</u>		Effluent/Receiving Waters	
_____ Compliance Schedule		_____ Laboratory/QA		_____ <u>S</u>		Operation/Maintenance	
_____ Records/Reports		_____ Self-Monitoring Program		_____		Pretreatment	
_____ Other (Specify): _____							
<b>Section D: Summary of Violations/Recommendations/Comments (Attach additional sheets if necessary)</b>							
<p><u>An NPDES sampling inspection was conducted today. Samples were collected from discharge points 201 and 301. These two discharges combine to form the Linwood bypass, which discharges to middle creek. This outfall looks OK. The booms and straw bridge downstream need to be replaced; some oil <sup>slam</sup> is getting through. South Jersey Pollution Control is on site skinning oil of separators and wherever else necessary. The oil is stored in a slop oil tank and reused. The water is sent</u></p>							
Inspector Name		Inspector Signature		Title		Date	
<u>Richard Breitenstein</u>		<u>Richard Breitenstein</u>		<u>was</u> <u>6/1/89</u>		<u>3-23-89</u>	
						Telephone	
						<u>270-1184</u>	
Name of Person Interviewed		Signature of Person Interviewed		Title		Date	
<u>Thomas Zale</u>		<u>Thomas Zale</u>		<u>Envir. Mgr.</u>		<u>3/22/89</u>	
						Telephone	
						<u>447-1139</u>	
<p>THIS DOCUMENT IS OFFICIAL NOTIFICATION THAT A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF WATER QUALITY MANAGEMENT, INSPECTED THE ABOVE FACILITY. THE FINDINGS OF THIS INSPECTION ARE SHOWN ABOVE AND ON ANY ATTACHED PAGES.</p> <p>ANY VIOLATIONS WHICH WERE UNCOVERED DURING THE INSPECTION ARE INDICATED. VIOLATIONS MAY ALSO BE DISCOVERED UPON EXAMINATION OF THE RESULTS OF LABORATORY ANALYSES OF THE DISCHARGE AND REVIEW OF DEPARTMENT RECORDS. NOTIFICATION WILL BE FORTHCOMING, IF SUCH VIOLATIONS ARE NOTED.</p>							

## Additional Comments

back to middle creek. all 7 final separators are in service with thick stagnant oil on most of them. When the weather warms, it will be removed by South Jersey. Where middle creek enters the Delaware River (in Delaware) there is some silt and debris entering. It is from dredging operations near the dock area. A boom is in middle creek to prevent any silt from travelling up the creek.

The river intake water is screened and any sludge is sent to a settling tank which is periodically pumped out. The sludge is sent to a filter press; the cake is landfilled and the water goes to middle creek. On Tuesday, 3-21-89 the Delcora gate valve was noticed open a bit. This was shut down. Some oil had gotten past the middle creek dam and down the creek staining is evident along the banks. The reason it was open is not known. A alarm system or a local light will be installed to prevent a recurrence. They are also going to add another boom right after the dam to surround the gate valve area. Some heavy oil still remains.

Facility is sending Delcora 9-10 mgd of separator effluent.

Dock 2A has some oil near the bulk-head which is contained by booms. The oil is coming from leaking underground pipelines that extend to the Delaware River. These pipes will be removed in the future. More aboveground pipes will be installed. The groundwater recovery is still in progress. Are getting very sporadic recovery lately. Outfalls 005, 006 + 007 are combined and enter middle creek next to Hewes avenue.

Permit No.: PA 0011096

Date: 3-23-89

Department of Environmental Resources		<b>NPDES Compliance Inspection Report</b>				Bureau of Water Quality Management	
<b>Section A: National Data System Coding</b>							
Transaction Code		NPDES		Yr/Mo/Day		Inspection Type	Inspector
1 <span style="border: 1px solid black; padding: 0 5px;"> </span> 2 <span style="border: 1px solid black; padding: 0 5px;">5</span>		3 <span style="border: 1px solid black; padding: 0 5px;">P</span> <span style="border: 1px solid black; padding: 0 5px;">A</span> <span style="border: 1px solid black; padding: 0 5px;">00</span> <span style="border: 1px solid black; padding: 0 5px;">1</span> <span style="border: 1px solid black; padding: 0 5px;">1</span> <span style="border: 1px solid black; padding: 0 5px;">8</span> <span style="border: 1px solid black; padding: 0 5px;">9</span> <span style="border: 1px solid black; padding: 0 5px;">6</span> <span style="border: 1px solid black; padding: 0 5px;">11</span>		12 <span style="border: 1px solid black; padding: 0 5px;">8</span> <span style="border: 1px solid black; padding: 0 5px;">8</span> <span style="border: 1px solid black; padding: 0 5px;">1</span> <span style="border: 1px solid black; padding: 0 5px;">1</span> <span style="border: 1px solid black; padding: 0 5px;">2</span> <span style="border: 1px solid black; padding: 0 5px;">9</span> <span style="border: 1px solid black; padding: 0 5px;">17</span>		18 <span style="border: 1px solid black; padding: 0 5px;">R</span>	19 <span style="border: 1px solid black; padding: 0 5px;">5</span>
<b>Section B: Facility Data</b>							
Name and Location of Facility Inspected <i>Seer Refining and Marketing Company</i> <i>P.O. Box 426 Marcus Hook, PA 19061</i>				Entry Time/Date <i>1015 11-29-88</i>		Permit Effective Date <i>6-25-86</i>	
				Exit Time/Date <i>1405 11-29-88</i>		Permit Expiration Date <i>6-25-91</i>	
Municipality <i>Marcus Hook</i>		County <i>Delaware</i>					
Name, Address of Responsible Official <i>Malcolm Flint</i>				Title <i>Refinery Manager</i>			
				Telephone <i>447-1000</i>		Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>Section C: Areas Evaluated During Inspection</b> (S = Satisfactory, I = Improvement Needed, U = Unsatisfactory, D = Does Not Apply, Blank = Not Evaluated)							
_____ Permit Verification		_____ Flow Measurement		<u>  S  </u>		Effluent/Receiving Waters	
_____ Compliance Schedule		_____ Laboratory/QA		<u>  S  </u>		Operation/Maintenance	
_____ Records/Reports		_____ Self-Monitoring Program		_____		Pretreatment	
_____ Other (Specify): _____							
<b>Section D: Summary of Violations/Recommendations/Comments (Attach additional sheets if necessary)</b>							
<p><i>An NPDES inspection was conducted this date. Cold + Windy. Outfall 101 was not discharging. There is more oil than normal in the middle creek impoundment area. South Jersey Pollution control is on site every day to remove any oil in the impoundment. They also replace booms + absorbents whenever necessary. Outfalls 501 + 301 were discharging to middle creek. Samples were collected. There doesn't appear to be much of a sheen near the outfall. Booms are continuously in place to catch any sheen that would appear. Water quality below the</i></p>							
Inspector Name		Inspector Signature		Title		Date	
<i>Richard Breitenstein</i>		<i>Richard Breitenstein</i>		<i>WQS</i>		<i>11-29-88</i>	
						Telephone <i>270-1184</i>	
Name of Person Interviewed		Signature of Person Interviewed		Title		Date	
<i>JUDY S BRACKIN</i>		<i>Judy S Brackin</i>		<i>Research Engineer</i>		<i>11-29-88</i>	
						Telephone <i>447-1185</i>	
<p>THIS DOCUMENT IS OFFICIAL NOTIFICATION THAT A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF WATER QUALITY MANAGEMENT, INSPECTED THE ABOVE FACILITY. THE FINDINGS OF THIS INSPECTION ARE SHOWN ABOVE AND ON ANY ATTACHED PAGES.</p> <p>ANY VIOLATIONS WHICH WERE UNCOVERED DURING THE INSPECTION ARE INDICATED. VIOLATIONS MAY ALSO BE DISCOVERED UPON EXAMINATION OF THE RESULTS OF LABORATORY ANALYSES OF THE DISCHARGE AND REVIEW OF DEPARTMENT RECORDS. NOTIFICATION WILL BE FORTHCOMING, IF SUCH VIOLATIONS ARE NOTED.</p>							

## Additional Comments

strawbridge looks OK. The pump by the Transport dock is still in operation, as ~~are~~ the product recovery & groundwater collection pumps by 2A dock. There is some oil near 2A dock by the bulkhead. South Jersey is trying to contain it with booms & skimmers. Target Environmental ~~is~~ trying to find the source of this oil. The containment area by the acid/lax pumps is full & needs to be emptied before more precipitation occurs. Also some water in the acid tank containment area.

006 is totally dismantled; no more to be. #2 Tank Farm - 006 discharge point is in use, but monitoring isn't required anymore. It is emptying stormwater only; no skew is present. 007 - is still in use & is monitored. Construction is almost complete (end of 1988) on the piping, separator ~~that~~ Water will either be sent to Delaware (via SUN's API's) or will be tarped out until completion of facilities.

Reed-Boyd Farm - 004 is coming back to Sun, the discharge is eliminated. 005 wasn't discharging today and hasn't for several weeks. It can be used if necessary, but isn't expected to be. Construction here is also scheduled for end of 1988. No discharge will occur after 1988. Will be pumped out by truck if necessary.

Permit No.: PA

0011096

Date: 11-29-88

# NPDES Compliance Inspection Report

## Section A: National Data System Coding

Transaction Code NPDES yr/mo/day Inspection Type Inspector Fac Type  
 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐

## Section B: Facility Data

Name and Location of Facility Inspected <b>SUN REFINING AND MARKETING COMPANY</b>		Entry Time/Date <b>12-17-87</b> 1000	Permit Effective Date <b>6-25-86</b>
P.O. Box 426 Marcus Hook, PA 19061		Exit Time/Date <b>12-17-87</b>	Permit Expiration Date <b>6-25-91</b>
Municipality <b>MARCUS HOOK BORO</b>	County <b>DELAWARE</b>		
Name, Address of Responsible Official <b>JOSEPH D. MAZZEI -</b> <b>(SAME)</b>		Title <b>REFINERY MGR.</b>	
		Telephone <b>447-1000</b>	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

## Section C: Areas Evaluated During Inspection

(S = Satisfactory, I = Improvement Needed, U = Unsatisfactory, D = Does Not Apply, Blank = Not Evaluated)

<u>S</u> Permit Verification	<u>S</u> Flow Measurement	<u>S</u> Effluent/Receiving Waters
<u>S</u> Compliance Schedule	<u>S</u> Laboratory/QA	<u>S</u> Operation/Maintenance
<u>S</u> Records/Reports	<u>S</u> Self-Monitoring Program	<u>D</u> Pretreatment
Other (Specify):		

## Section D: Summary of Violations/Recommendations/Comments (Attach additional sheets if necessary)

SEPARATORS ARE UNDERGOING MAJOR MAINTENANCE ACTIVITIES. CLEANING, GRAVEL REPLACEMENT, REDUCED SPILL PROTECTION, ETC. WATER QUALITY BELOW STRAUBIDGE STOKES MADE IMPROVEMENT. THE TRANSPORT CLOTH HAS BEEN SUCCESSFULLY REPLACED AND CONTAINMENT CLOTH. ADDITIONAL PUMP ASSEMBLY STILL INSTALLED AT THE END OF THE PUMP RUN-OFF TO THE WASTEWATER TREATMENT PLANT. FRODOF AND GROUNDWATER COLLECTION PUMPS.

Inspector Name <b>Ruth M. Plant</b>	Inspector Signature <i>Ruth M. Plant</i>	Title <b>WATER QUALITY SPECIALIST</b>	Date <b>12-17-87</b>
Name of Person Interviewed <b>TRECOORE</b> <b>SPACOWSKY</b>	Signature of Person Interviewed <i>Joseph D. Mazzei</i>	Title <b>SR ENV ENG</b>	Date <b>12/17/87</b>
			Telephone <b>215 270-1975</b>
			Telephone <b>447-1176</b>

THIS DOCUMENT IS OFFICIAL NOTIFICATION THAT A REPRESENTATIVE OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES, BUREAU OF WATER QUALITY MANAGEMENT, INSPECTED THE ABOVE FACILITY. THE FINDINGS OF THIS INSPECTION ARE SHOWN ABOVE AND ON ANY ATTACHED PAGES.

ANY VIOLATIONS WHICH WERE UNCOVERED DURING THE INSPECTION ARE INDICATED. VIOLATIONS MAY ALSO BE DISCOVERED UPON EXAMINATION OF THE RESULTS OF LABORATORY ANALYSES OF THE DISCHARGE AND REVIEW OF DEPARTMENT RECORDS. NOTIFICATION WILL BE FORTHCOMING, IF SUCH VIOLATIONS ARE NOTED



## Additional Comments

11KE installed and being used on #2  
dock in accord with plans submitted.  
logs on all recoveries kept in  
dock office.

Permit No.: PA 0011096

Date: 12-17-87

PA

1142

Gen'l.  
Info.

296

REGION NOR-EAST  
DISTRICT DEL-DE  
AP FILE NO. 23-000-135

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF AIR QUALITY CONTROL  
SEMI-ANNUAL  
INSPECTION VERIFICATION REPORT  
FOR MAJOR FACILITIES

COMPANY NAME SUN Refinery DATE INSPECTED April 25, 1989  
OWNERS NAME SUN Corp. INSPECTED BY Neil O'Connor  
LOCATION MARCO'S HARBOR DEL. REVIEWED BY RLR  
NEXT INSPECTION DATE \_\_\_\_\_  
OFFICIAL(S) CONTACTED Arthur Merritt TITLE Envir. Engineer

NONCOMPLYING SOURCES (use back if necessary) STANDARD(S) VIOLATED  
Racing fuel Leak @ Loading term..... 129.62(a) - NOV will be sent

Barge - Interstate 53 Venting Gasoline..... 121.7 AND 123.1(a) Barge  
thru water while ON-LOADING..... loading is not currently  
..... requested. RLR

SOURCES NOT OPERATING (use back if necessary) REASON(S) (no production, malfunction, breakdown, etc.)  
UDEX - Benzene Mft..... off Line AND Down for Service  
Benzene Barge Loading..... NOT scheduled

FOLLOW-UP ACTIONS REQUIRED A New Smoke Detector is Scheduled to be  
installed on the Baker stack. Fire school excessive smoke  
were reviewed with the company and the need for correction

COMMENTS (continue on back if necessary) Boiler system AND Co-Gen System:  
All Eight Bakers ON Line: Gas usage 656 Mft<sup>3</sup> (6), Oil 325 Gal/hr (6)  
Co-Gen ON Hydrogen gas 2109 Mft<sup>3</sup>. Sulfur of Oil 0.08 - 0.09  
The Separators were visited and were  
tight. The Racing fuel Loading Rack was inspected  
also the Barge Area AND the UDEX plant (Closed) + HARE  
30/11 for spill at CAM II rack

DR Meslato CCMC

3/11/11

Sum Oil Inspection 198

FCC Unit ESP's		AC-V	DC-KV	AC-AMPS	DC-M.A.
Buell inlet center	N	340	35	29	290
" " "	S	—	—	32	250
Buell outlet center	N	330	32	68	440
" " "	S	—	—	13	290
Buell outlet	N	—	5	—	—
" " "	S	300	36	84	620
Lodge outlet	N	—	—	—	—
" " "	S	—	—	—	—
Lodge center	N	350	21	50	370
" " "	S	360	54	85	140
Lodge inlet	N	340	21	—	200
" " "	S	—	—	—	—
Buell inlet	N	360	34	45	276
" " "	S	—	—	28	90

SO<sub>2</sub> meter at 10 plants 350 ppm %S\* { DERIVED  
371 MAX/hr. { ALTERNATE

\*Note meter reads 2x real value of %S

Opacity monitor Model 456 PM  
Visual opacity 90% → 139% Time

Fuel Type GAS/OIL + Resid. Amount

Alternate fuel Amount

the sources

102 Benzene Loading Loading yes ☐ Emission NONE  
NO ☒ opacity NONE

Comments:

103 Herreshoff Furnace fuel Amt  
Opacity

Comments:

DISCONTINUED - Deleted

104 12 Plant flare Is used ☒ fuel  
No ☐ Amt  
Opacity

Comments:

105 10 plant flare fuel  
Amt  
Opacity

Comments:

REGION \_\_\_\_\_

DISTRICT \_\_\_\_\_

AP FILE NO. \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF AIR QUALITY CONTROL  
SEMI-ANNUAL  
INSPECTION VERIFICATION REPORT  
FOR MAJOR FACILITIES

COMPANY NAME \_\_\_\_\_ DATE INSPECTED \_\_\_\_\_

OWNERS NAME \_\_\_\_\_ INSPECTED BY \_\_\_\_\_

LOCATION \_\_\_\_\_ REVIEWED BY \_\_\_\_\_

NEXT INSPECTION DATE \_\_\_\_\_

OFFICIAL(S) CONTACTED \_\_\_\_\_ TITLE \_\_\_\_\_

NONCOMPLYING SOURCES (use back if necessary)      STANDARD(S) VIOLATED

\_\_\_\_\_ .....

\_\_\_\_\_ .....

\_\_\_\_\_ .....

\_\_\_\_\_ .....

\_\_\_\_\_ .....

SOURCES NOT OPERATING (use back if necessary) REASON(S) (no production, malfunction,  
breakdown, etc.)

\_\_\_\_\_ .....

\_\_\_\_\_ .....

FOLLOW-UP ACTIONS REQUIRED \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COMMENTS (continue on back if necessary) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

REGION \_\_\_\_\_

DISTRICT \_\_\_\_\_

AP FILE NO. \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF AIR QUALITY CONTROL  
SEMI-ANNUAL  
INSPECTION VERIFICATION REPORT  
FOR MAJOR FACILITIES

COMPANY NAME \_\_\_\_\_ DATE INSPECTED \_\_\_\_\_

OWNERS NAME \_\_\_\_\_ INSPECTED BY \_\_\_\_\_

LOCATION \_\_\_\_\_ REVIEWED BY \_\_\_\_\_

NEXT INSPECTION DATE \_\_\_\_\_

OFFICIAL(S) CONTACTED \_\_\_\_\_ TITLE \_\_\_\_\_

NONCOMPLYING SOURCES (use back if necessary)      STANDARD(S) VIOLATED

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

SOURCES NOT OPERATING (use back if necessary) REASON(S) (no production, malfunction,  
breakdown, etc.)

\_\_\_\_\_

\_\_\_\_\_

FOLLOW-UP ACTIONS REQUIRED \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

COMMENTS (continue on back if necessary) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Rick Shyman

HAZARDOUS WASTE INSPECTION REPORT  
TSD Facilities - Part A

Date of inspection Jan 28 1986 Time start 10<sup>00</sup> Time finish 3<sup>00</sup>  
Name of inspector Carol Kurtz  
Company, installation name Sun Refining & Marketing Co, Inc  
Location Delaware Ave & Green St  
County Delaware Municipality Marcus Hook  
Identification number PAD 98055-0594  
Name of responsible official Arthur Raymond  
Title Mgr. Environmental Engineering  
Mailing address PO Box 426, Marcus Hook, PA 19061  
Area code and phone no. 215 - 447 - 1176  
Name of person interviewed Richard Ware  
Title Sr. Environmental Engineer  
Mailing address (if different from above) same  
Area code and phone no. 215 - 447 - 1178

1. Site characterization:

- a. ☒ Treatment - ☐ surface impoundments, ☒ chemical, ☒ physical, ☐ biological  
b. ☒ Storage - ☒ containers, ☒ tanks, ☐ surface impoundments, ☐ waste piles  
c. ☐ Disposal - ☐ land treatment, ☐ landfill, ☐ incineration, ☐ thermal treatment  
d. ☐ Use, ☐ reuse, ☐ recycle, ☐ reclaim

2. Does the facility generate hazardous wastes? ☒ Yes ☐ No

3. Types of hazardous waste produced by Hazardous Waste Number:

K048 - 52

D001 - 2

D007 - 8

4. Are hazardous wastes transported off-site by the facility? ☐ Yes ☒ No \*

(\* have a HWT license # PA AH0112)

JAN 0 1986



TSD

Hazardous Waste Inspection Report  
Generators - Part A

Date of inspection December 14, 1988 Time start 9:15 Am Time finish 4:15 pm  
 Name of inspector Brian K. Boyd  
 Company, installation name Son Refining and Marketing Co. Inc.  
 Location Delaware Ave + Green Sts  
 County Delaware Municipality Marcus Hook Boro  
 Identification number PAD 980550594  
 Name of responsible official Arthur Raymond  
 Title Mgr. Environmental Engineering  
 Mailing address P.O. Box 426 Marcus Hook, Pa 19061-0426  
 Area code and telephone number (215) 447-1176  
 Name of person interviewed Richard Ware  
 Title Senior Environmental Engineer  
 Mailing address (if different from above) P.O. Box 426 Marcus Hook, Pa. 19061  
 Area code and telephone number (215) 447-1178

## 1. Current waste handling method:

- |   |  |  |  |   |
|---|--|--|--|---|
| a. <input checked="" type="checkbox"/> On-site  | <input checked="" type="checkbox"/> treatment, | <input checked="" type="checkbox"/> storage, | <input type="checkbox"/> disposal            | <input type="checkbox"/> PBR                |
| b. <input checked="" type="checkbox"/> On-site  | <input type="checkbox"/> use,                  | <input type="checkbox"/> reuse,              | <input checked="" type="checkbox"/> recycle, | <input checked="" type="checkbox"/> reclaim |
| c. <input checked="" type="checkbox"/> Off-site | <input type="checkbox"/> treatment,            | <input type="checkbox"/> storage,            | <input checked="" type="checkbox"/> disposal |   |
| d. <input type="checkbox"/> Off-site            | <input type="checkbox"/> use,                  | <input type="checkbox"/> reuse,              | <input type="checkbox"/> recycle,            | <input type="checkbox"/> reclaim            |

## 2. Amount of hazardous waste produced:

- a. see → kg./mo.  
 b. see → kg./yr.

1988  
 1st Qtr - 5,292,000 lbs  
 2nd Qtr - 2,620,000 lbs  
 3rd Qtr - 2,606,000 lbs

## 3. Types of hazardous waste produced by Hazardous Waste Number:

K041 - D001 D008  
 K051 D002 F002

4. Are hazardous wastes transported off-site by the generator? ☐ Yes ☒ No

Hazardous Waste Inspection Report  
Generators — Part B

1—No Violation Observed				2—Not Applicable	3—Not Determined	4—Non-Compliance
Status				REQUIREMENT		Chapter Citation
1	2	3	4			75.262
✓				Hazardous waste determination, copies available		(b)
✓				Identification number		(c)(1)
✓				Hazardous waste shipments offered only to licensed transporters		(c)(4)
		✓		Authorization received from TSD facility for wastes shipped off-site		(d)
✓				PA manifest used for intrastate shipments		(e)(2)
✓				Disposer state manifest or EPA format manifest used for out-of-state shipments		(e)(3)
✓				Manifests filled out properly and completely		(e)(7)
✓				Manifests routed properly and within time limits (7 days)		(e)(14) or (15)
	✓			Proper U.S. DOT shipping containers or packages		(f)(1)(i)
	✓			Shipping containers marked and labeled according to U.S. DOT		(f)(1)(ii)
	✓			Containers of 110 gal. or less marked with required PA label <i>none used</i>		(f)(1)(iii)
		✓		Placards offered to transporter		(f)(2)
	✓			Wastes accumulated on-site for less than 90 days		(g)(1)(i)
	✓			Wastes stored in proper containers and properly marked and labeled		(g)(1)(ii)
	✓			Containers managed in accordance with 75.265(q)(1)–(9)		(g)(1)(iii)
	✓			Containers clearly marked with accumulation date and visible for inspection		(g)(1)(iv)
✓				Records retained at designated location for 20 years		(h)
				Quarterly reports submitted to the Department		(i)
	✓			Exception reporting procedures followed		(j)
	✓			Hazardous waste disposal plan, if required		(l)
				Spill reporting procedures followed <i>Spill at Tank 5 not reported</i>		(m)(1)
✓				Preparedness, Prevention and Contingency Plan and implemented		(m)(5)
	✓			Special requirements followed for international shipments		(o)
✓				On the job or classroom personnel training program [75.265(f)]		(g)(1)(6)
	✓			Drum accumulation area inspected weekly as per 75.265(q)(5) <i>No Drum Storage Area in use</i>		(g)(1)(iii)

Hazardous Waste Inspection Report  
TSD Facilities - Part A

Date of inspection December 14, 1988 Time start 9:15 Am Time finish \_\_\_\_\_  
Name of inspector Brian K. Boyd  
Company, installation name Sun Refining and Marketing Co. Inc.  
Location Delaware Ave. + Green Sts.  
County Delaware Municipality Marcus Hook Boro  
Identification number PAD 980550594  
Name of responsible official Arthur Raymond  
Title Mgr. Environmental Engineering  
Mailing address P.O. Box 426 Marcus Hook, Pa 19061-0426  
Area code and telephone number (215) 447-1176  
Name of person interviewed Richard Ware  
Title Senior Environmental Engineer  
Mailing address (if different from above) P.O. Box 426 Marcus Hook, Pa 19061-0426  
Area code and telephone number Marcus Hook - (215) 447-1178

## 1. Site characterization:

- a. ☒ Treatment - ☐ surface impoundments ☒ chemical ☒ physical ☐ biological  
b. ☒ Storage - ☒ containers ☒ tanks ☐ surface impoundments ☐ waste piles  
c. ☐ Disposal - ☐ land treatment ☐ landfill ☐ incineration ☐ thermal treatment  
d. ☐ Use ☐ reuse ☐ recycle ☐ reclaim

2. Does the facility generate hazardous wastes? ☒ Yes ☐ No

3. Types of hazardous waste produced by Hazardous Waste Number:

4. Are hazardous wastes transported off-site by the facility? ☐ Yes ☒ No

Hazardous Waste Inspection Report  
TSD Facilities — Part B

1—No Violation Observed					2—Not Applicable					3—Not Determined					4—Non-Compliance				
Status					R E Q U I R E M E N T										Chapter Citation				
1	2	3	4											75.265					
✓				Part A permit application submitted.										(a)(2), (z)(2)					
✓				Identification number.										(b)					
✓				Wastes accepted at facility transported by haulers licensed to transport hazardous waste by the Department.										(b)(1)					
		✓		Waste streams not covered by permit approved by the Department before acceptance.										(c)(1)					
			✓	Chemical and physical analyses repeated as required. <i>see comments</i>										(c)(1)					
			✓	All waste shipments inspected and sampled.										(c)(2)					
✓				Waste analysis plan on-site.										(c)(3)					
✓				24 hr. surveillance at active portion.										(d)(2)(i)					
✓				Artificial barrier at active portion.										(d)(2)(ii)					
✓				Proper signs posted and legible at a distance of at least 25 ft.										(d)(3)					
✓				Inspection schedule on-site.										(e)(2)					
✓				Maintenance schedule on-site for equipment or structures which reveal deterioration or malfunction.										(e)(4)					
	✓			Immediate remedial action taken where a hazard is imminent or has already occurred.										(e)(4)					
✓				On the job or classroom personnel training program.										(f)					
✓				Records retained for each employee at facility of training, job title, and job description.										(f)(6), (7)					
✓				Ignitable or reactive wastes separated from source of ignition or reaction.										(g)(1)					
✓				No smoking signs displayed where there are hazards from ignitable or reactive wastes.										(g)(1)					
✓				Treatment, storage, disposal of ignitable or reactive wastes or mixing of incompatible wastes or materials conducted according to requirements.										(g)(2)					
✓				Facility maintained/operated to minimize possibility of fire, explosion, or discharge of hazardous waste or hazardous constituents.										(h)(1)					
✓				Facility equipped with internal alarm system capable of providing immediate emergency instruction to personnel.										(h)(2)(i)					
✓				Facility equipped with a device for summoning outside emergency assistance.										(h)(2)(ii)					
✓				Facility equipped with fire control, spill control, and decontamination equipment.										(h)(2)(iii)					
✓				Facility equipped with water at adequate volume and pressure to supply fire control equipment.										(h)(2)(iv)					
✓				Facility communications or alarm systems, fire control, spill control, and decontamination equipment tested and maintained.										(h)(3)					
		✓		Adequate aisle space maintained to allow unobstructed movement of personnel and equipment during emergencies.										(h)(6)					
✓				Contingency plan on-site and implemented.										(i)(1)					
✓				Contingency plan describes action taken by personnel in the event of an emergency.										(i)(3)					

Hazardous Waste Inspection Report  
TSD Facilities — Part B (Continued)

1—No Violation Observed				2—Not Applicable				3—Not Determined				4—Non-Compliance					
Status				R E Q U I R E M E N T												Chapter Citation	
1	2	3	4													75.265	
✓				Contingency plan describes arrangements agreed to for outside emergency services such as police and fire department, hospitals, contractors, etc.												(i)(5)	
✓				Contingency plan contains an up-to-date list of names, addresses and phone numbers of all persons qualified to act as emergency coordinator.												(i)(6)	
✓				Contingency plan contains list of emergency equipment including location, physical description and capabilities of each item.												(i)(7)	
✓				Contingency plan contains an evacuation plan if there is a possibility that evacuation could be necessary.												(i)(8)	
✓				One employee designated as the primary emergency coordinator either on the premises or on call.												(i)(11)	
✓				Facility accepting only PA manifests.												(j)	
✓				Manifest properly completed and routed within time limits (24 hrs.)												(j)(2), (3)	
✓				Manifest discrepancies resolved or reported within time limits.												(j)(10), (11)	
✓				Written operating record maintained on the premises.												(k)	
✓				Written operating record contains description and quantity of wastes and method of treatment, storage or disposal.												(k)(2)(i)	
	✓			Written operating record contains location and quantity of each hazardous waste.												(k)(2)(ii)	
			✓	Written operating record contains results of waste analyses and treatability tests.												(k)(2)(iii)	
				Written operating record contains reports and details of all incidents. <i>Spill from Tank #5</i>												(k)(2)(iv)	
✓				Written operating record contains records and results of all inspections.												(k)(2)(v)	
✓				Written operating record contains required monitoring, testing, and analytical data.												(k)(2)(vi)	
✓				Written operating record contains closure and post-closure cost estimates												(k)(2)(vii)	
✓				All records retained on premises and available for inspection.												(l)	
✓				Quarterly reports submitted to the Department.												(m)	
	✓			Emissions, discharges, fires, explosions, and groundwater contamination reported as required.												(m)(2)	
	✓			Groundwater monitoring wells located at approved sites.												(n)(2)	
	✓			Adequate protection groundwater monitoring wells.												(n)(7)	
	✓			Groundwater sampling and analysis plan on the premises.												(n)(8)	
	✓			Groundwater quality assessment and abatement outline on the premises.												(n)(14)	
✓				Closure plan on the premises and up-to-date.												(o)(2)–(9)	
	✓			Post-closure plan on the premises and up-to-date.												(o)(10)–(19)	
✓				Annual closure cost estimate on the premises and up-to-date.												(p)(2)–(4)	
	✓			Annual post-closure cost estimate on the premises and up-to-date.												(p)(5)–(7)	

## Hazardous Waste Inspection Report TSD Facilities – Storage (Tanks)

[illegible]

**Hazardous Waste Inspection Report  
TSD Facilities — Storage (Containers)**

1—No Violation Observed				2—Not Applicable				3—Not Determined				4—Non-Compliance					
Status				REQUIREMENT												Chapter Citation	
1	2	3	4													75.265	
				Containers managed to prevent leaks and spills.												(q)(1), (4)	
				Containers are compatible with waste stored.												(q)(2)	
				Containers are closed during storage.												(q)(3)	
				Container storage area inspected weekly for leaks, deterioration, etc.												(q)(5)	
				Containers holding ignitable or reactive wastes are set back 15 m (50 ft) from property line.												(q)(6)	
				Satisfactory procedures followed for handling incompatible wastes.												(q)(7), (8)	
				Incompatible wastes separated or protected from other materials.												(q)(9)	
				Containers accumulation areas have containment system capable of collecting and holding spills, leaks, and precipitation.												(q)(10)	
				Containment system has impervious base free of cracks.												(q)(10)(i)	
				Efficient drainage provided from base to sump or collection system.												(q)(10)(ii)	
				Containment sufficient to contain volume of largest container or 10% of total volume of all containers, whichever is greater.												(q)(10)(iii)	
				Run-on into containment system prevented.												(q)(11)	
				Spilled or leaked waste and accumulated precipitation removed from sump or collection system with sufficient frequency to prevent overflow.												(q)(12)	
				At closure, all hazardous wastes and hazardous waste residues removed. Remaining containers, liners, bases, and soil decontaminated or removed.												(q)(13)	
				Indoor accumulation of reactive or ignitable waste with less than 20% solids meets height and configuration criteria ( $\leq 6$ feet high, 8 ft x 8 ft., 5-foot surrounding aisle space).												(q)(14)(i)	
				Outdoor accumulation of reactive waste with less than 20% solids meets height and configuration criteria ( $\leq 9$ feet high, 16 ft x 16 ft, 5-foot aisle surrounding group, 12 ft access way).												(q)(14)(ii)	
				Minimum setback of 40 feet maintained for outdoor container accumulation of ignitable or reactive wastes.												(q)(14)(ii)	
				Accumulation of nonreactive or nonignitable hazardous waste meets height and configuration criteria ( $\leq 9$ feet high).												(q)(14)(iii)	
				Containers labeled to accurately identify hazardous waste contained.												Act 97 Section 403(b)(2)	

*There are presently no containers of hazardous waste being stored in the specified area.*

## Inspection Report Comments

Date of Inspection December 14, 1988 Identification Number PAD 980550594  
Company/Facility/Site Name Sun Refining and Marketing Co. Inc.

A large quantity generator and TSD inspection was performed at the Sun Ref. & Marketing Solid Waste Facility. Present during this inspection was Paul Panek, Carl Rohr, Brian Boyd from D.E.R. and Richard Ware of Sun. During this inspection the following was observed:

- 1) Tanks TK-1, 2, 3, 4, 5 in the Solid Waste Facility are not properly labelled so as to identify their contents.
- 2) Tank #5 was overfilled which caused a spill of API Sludge (K051). This spill residue remains in the tank containment area. An inspection of a Tank #5 Inspection and Status Report (performed by Sykes & Sons on 2/5/87) states that the high level alarm may not work. Mr. Don Wall stated that this tank only has a visual alarm and no audible alarm. This high level alarm should be modified/repared to prevent future incidents. As agreed by Mr. Ware, the tank containment spillage and residues will be removed and properly disposed of by January 30, 1989. Mr. Ware also agreed to have all tanks (1-5) properly labelled by 1/30/89.
- 3) The present Waste Analysis Plan (WAP) as stated in Sun's Part B Permit is not consistent with procedures being used. All incoming wastes are not conforming to Waste Acceptance and Fingerprint Analyses requirements. All incoming shipments of hazardous waste should be verified through the present WAP. If the present plan is too cumbersome, it should be modified and approved by the Department.

In the "Requirement" Section of this inspection report, each listed inspection item may provide only a brief version of its corresponding obligation as described in the body of the regulations. Please use the Chapter citations listed on this inspection report as a reference to obtain a detailed description of compliance requirements.

This inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Waste Management, inspected the above installation. The findings of this inspection are shown in this report. Any violations which were observed during the inspection are indicated. Violations may also be discovered upon examination of the results of laboratory analyses and review of Department records. Notification may be forthcoming, confirming any violations indicated herein and listing any additional violations.

This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein.

Signature by the person interviewed does not necessarily imply concurrence with the findings on this report, but does acknowledge that the person was shown the report or that a copy was left with the person.

Person Interviewed (signature)

*Paul Panek*  
*Brian K. Boyd*

Date

12/14/88

Inspector (signature)

Date

12/14/88

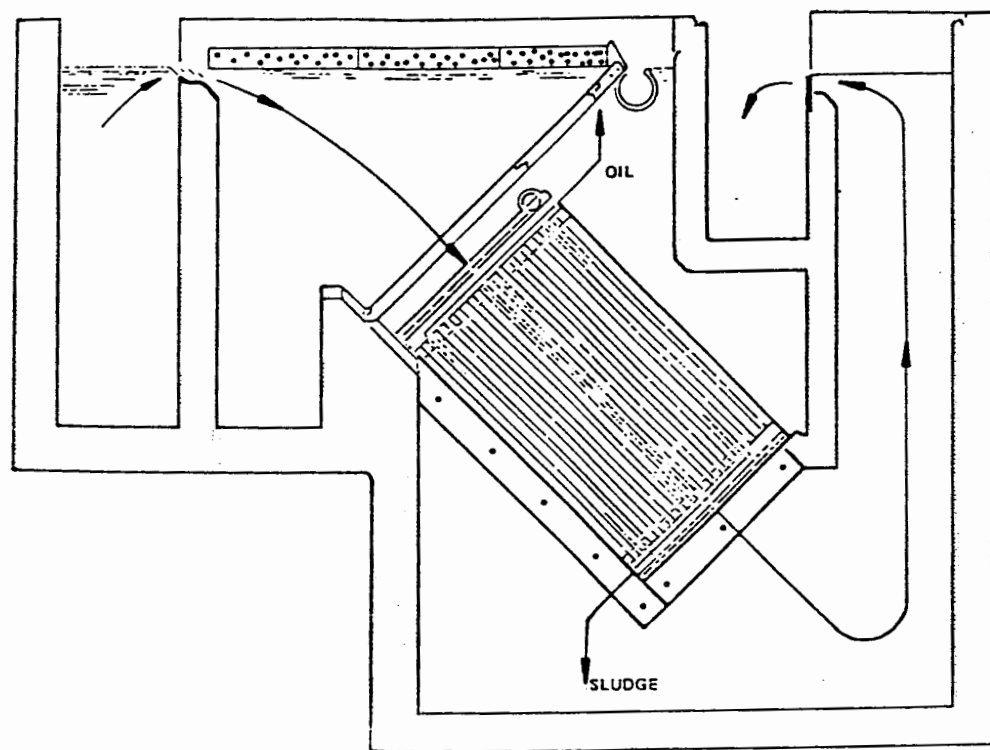
Page \_\_\_\_ of \_\_\_\_



\* Note— Per conversation w/ Larry Lonsk on 12/19/88, the Dept. should not request that SUN submit MOD I's for incoming wastes.

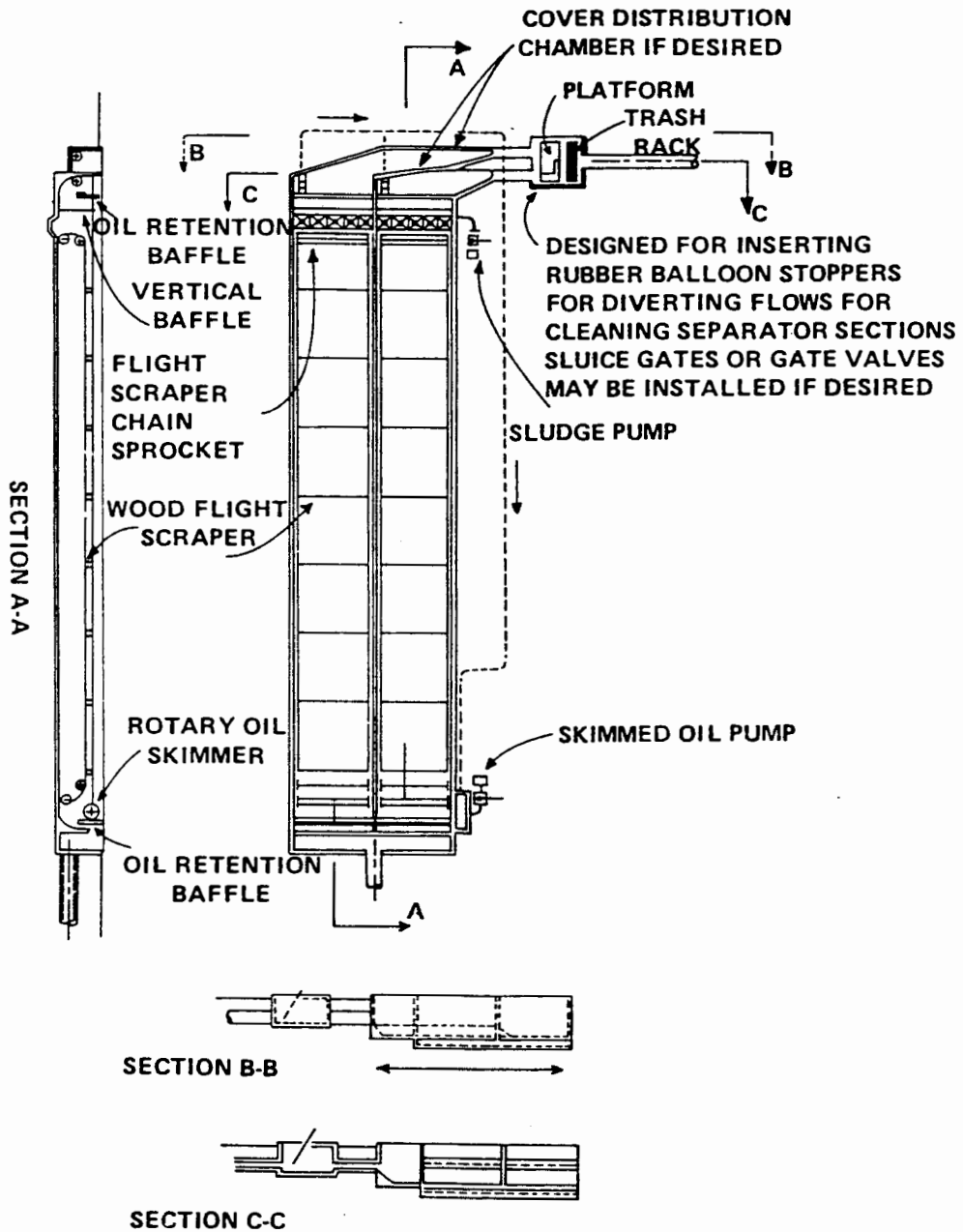
363

**FIGURE 7.17**  
Corrugated Plate Oil Separator



**FIGURE 7.18**  
**Example of General Arrangement for API Separator**

(Courtesy of the American Petroleum Institute.)



SEPARATOR CLEANING SCHEDULE ✓  
SPRING/FALL 1990

SEPARATOR	PROPOSED CLEANING WEEK OF:	FREQUENCY	DATE LAST CLEANING	INCHES PRIMARY	INCHES SECONDARY	REMARKS
1-A	MAR-5-91	14 MOS	11-22-89	28"	—	
1-C	APR 16-90	18 MOS	10-24-88	31"		
1-D		AS NEEDED	10-9-89	48"		
1-f		12 MOS	10-9			WILL SCHEDULE <sup>1-f</sup> WHEN NU PLATE PACKS E.T.A.
10-A	JUNE 11-90	6 MOS	12-21-89	33"	—	REMOVE COVERS, INCLUDING INLET COVERS
10-B	JUNE 15-90	"	"	36"	—	
12-A	JUNE 26	6 MOS	12-16-89	FIRST CLEANING		INCLUDE CLEANING EFFLUENT FLUME & INLET GOK
12-B	JUNE 27	6 MOS	12-16-89	FOLLOWING INSTALLATION OF NU PLATE PACKS		
15-A		6 MOS	11-16-89	37"		
15-B		6 MOS	11-14-89	28"		
15-C	APR 23-90		10-16-90	25"		
15-D	APR 30-90		10-18-90	28"		INLET VALVES LEAKING THRU
15-E	MAY 3-90		10-26-90	22"		INLET VALVES LEAKING THRU
15-F	4-10, 5-8, 6-5, 7-9, 7-7	25 DAYS	8-29-90	48"		
15-G	MAY 16-90	6 MOS	11-4-90	23"		INLET VALVES LEAKING THRU
15-H	MAY 10-90	6 MOS	11-6-90	33"		
16-A	JUNE <del>MAY</del> 5-90	6 MOS	11-28-90	17"		REMOVE INLET COVERS CLEAN
16-B	MAY 29-90	6 MOS	11-24-90	23"		SUCTION SUMPS (?) ALL 3 PACKETS
16-C	MAY 22-90	6 MOS	11-20-90	15"		
V-29		AS NEEDED				
132 sk	9-5-90	12 MOS	5-7-89	6'-7'		EXCESSIVE LOADING DUE TO 10-4 SLURRY DUMPING
W-12	10-8-90	?	1993			CONTINGENT UPON RESULTS OF INFRARED SURVEY

Date Prepared

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WASTE MANAGEMENT354  
I.D. NumberFORM C  
COMPLIANCE HISTORY  
(Formerly "Module #10")

(For Department Use Only)

Fully and accurately provide the following information, as specified.  
Attach additional sheets as necessary.

☐ Original Filing    ☒ Amended Filing    Date of Last Filing September 17, 1988

## A. General Applicant Information:

1. NAME OF PERMIT OR LICENSE APPLICANT/PERMITTEE/LICENSEE: \_\_\_\_\_

Sun Refining and Marketing CompanyADDRESS: Marcus Hook RefineryDelaware Avenue & Green StreetMarcus Hook, PA 19061TELEPHONE NUMBER: (215) 447-1000SOCIAL SECURITY OR TAXPAYER ID#: 23-1743283

2. Identify the form of management under which the applicant conducts its business in Pennsylvania (check appropriate box):

☐ Individual☐ Municipality☐ Proprietorship☒ Public Corporation☐ Private Corporation☐ Syndicate☐ Municipal Authority☐ Partnership☐ Limited Partnership☐ Government Agency☐ Joint Venture☐ Association☐ Other \_\_\_\_\_

(specify the nature of the business relationship)

## B. General Information Regarding "Related Parties"

1. Provide the names, addresses and telephone numbers of person or parties related to the applicant (reference the "Instructions for Form C", Items 4 and 5). The relationship to the applicant shall be clearly described (a diagram of corporate structure would be helpful, and may be provided).  
N/A
2. Provide the names and addresses of all owners of record of surface and subsurface areas within and contiguous to the proposed permit area.  
N/A
3. Provide the names and addresses of all holders of record to a leasehold interest of surface and subsurface areas within, and contiguous to the proposed permit area.  
N/A

## FORM C

4. For applicants other than sole proprietorships, the following information<sup>2</sup> shall be provided:

(a) Names, addresses and social security numbers of all principals, corporate officers, general and limited partners, directors and other persons performing a function similar to a director of the applicant.

See Attached List

(b) For corporations, the principal shareholders or stockholders who own, hold, or control stock of five percent (5%) or more of a publicly held corporation or ten percent (10%) or more of a privately held corporation.

N/A

(c) For corporations, state the names, principal places of business and taxpayer ID numbers of all domestic and foreign parent corporations (including ultimate parent corporations), and all domestic and foreign subsidiary corporations of the applicant, as well as the subsidiary corporations of the ultimate parent corporation. Include unincorporated divisions and private corporations.

Sun Company, Inc., Radnor, PA is the parent corporation of Sun Refining and Marketing Company. The Sun Company Tax ID No. is: 23-1743282.

(d) Names, addresses and social security numbers\*, or IRS tax identification numbers and affiliation of other persons or related parties having or exercising control over any aspect of the proposed facility or activity that is regulated by the Department, including but not limited to, associates, and agents, contractors, subcontractors, and property owners.

None

(e) List all principals that have also been principals of other corporations which have committed violation of the Environmental Protection Acts. (see "Instructions" attached.)

None

5. If the applicant, or an officer, principal shareholder, general or limited partner, or other related party to the applicant, has as a beneficial interest in, or otherwise manages or controls any other person, municipality or other related party (as described in Sections A and B herein) engaged in the business of solid waste collection, transportation, storage, processing, treatment, or disposal, the following information shall be provided:

None

(a) The name, address, and tax identification number or employer identification number of the corporation or other person or municipality, or other entity.

(b) The nature of the relationship or participation with the corporation or other person or municipality, or other related party.

\*Supplying individual social security numbers is optional; failure to provide all applicable numbers may make processing of the application more time-consuming.

## FORM C

### C. Specific Information Regarding the Applicant and Its Related Parties

1. Identify all of the applicant's places of business and terminals where:
  - (a) municipal or residual waste processing or disposal facilities or activities are conducted in Pennsylvania.
  - (b) hazardous waste generation (with the exception of small quantity generation), transportation, storage, treatment or disposal facilities or activities are conducted in Pennsylvania.

Please See Attached List

2. List all permits or licenses issued by the Department under the Environmental Protection Acts to the applicant or any other persons or related parties identified in Sections A or B, that are currently in effect or have been in effect at any time in the ten years previous to the date on which this form is completed. This list is to include the type of permit or license, number, location, issuance date and expiration date.

Please See Attached List

3. List all permit or licenses denials issued by the Department under the Environmental Protection Acts to the applicant or any other person or related party identified in Section A or B, within ten years previous to the date on which this form is completed. This list is to include the type of permit or license, number, location, denial date and reason for denial.

None

4. List all persons or related parties identified in Sections A or B which have filed or been discharged from bankruptcy within 10 years previous to the date on which this form is completed for which the debtor sought to abandon property or to be discharged from liability for any environmental liability subject to the Environmental Protection Acts. This list to include the name of the bankruptcy court, docket number and description and location of property involved.

N/A

## FORM C

### D. Compliance Background:

*(Note: Copies of specific documents shall be made available to the Department upon its request)*

#### 1. Compliance History Inside Pennsylvania:

- a. Describe any "Notice of Violation" sent by the Department to the applicant or those persons or related parties identified anywhere in response to Sections A or B.

<i>Date</i>	<i>Location</i>	<i>Permit/ License/ EPA ID#</i>	<i>Nature of Violation</i>	<i>Disposition</i>
-------------	-----------------	---	--------------------------------	--------------------

See Attached List

- b. Describe any administrative orders issued by the Department, civil penalties assessed by the Department, permit or license suspensions/revocations, bond forfeiture actions brought by the Department, and civil penalties actions adjudicated by the Environmental Hearing Board against the applicant or those persons or related parties identified anywhere in Sections A or B concerning the Environmental Protection Acts, or of a regulation or order of the Department, or of a condition of a permit or license. Provide the date, location and nature of the violations. In lieu of description, the applicant may provide a copy of the orders, assessments and actions.

See Attached List

- c. Describe any summary, misdemeanor, or felony convictions, or pleas of guilty or no contest that have been obtained in Pennsylvania against the applicant or those persons or related parties identified anywhere in Sections A or B pursuant to the Environmental Protection Acts or for any acts in Pennsylvania involving the storage, treatment, transportation, processing or disposal of municipal, residual or hazardous wastes. The description shall include the date, location, nature and disposition of the actions.

None



## FORM C

- d. Describe any Pennsylvania court proceedings in which those persons or related parties identified anywhere in Sections A or B have been involved in relation to the Environmental Protection Acts.

N/A

- e. Describe any consent order, consent adjudication, consent decree or monetary settlement (settlement agreement, letter agreement, settlement letter or consent assessment) between the applicant or those persons or related parties identified anywhere in Sections A or B and the Department, US EPA, or a county health department, regarding the Environmental Protection Acts, or any other environmental statute, regulations or ordinance concerning any municipal residual or hazardous waste facility or activity in Pennsylvania. The description shall include the date, location, nature and disposition of the action. In lieu of a description, the applicant may provide a copy of the order, adjudication, decree or agreement.

None

- f. For all facilities and activities identified in Section C, indicate all violations committed and subsequent enforcement actions (with the exception of Notices of Violation) taken regarding the facility or activity. Include the date of the action, the location, the nature, and disposition of the violation. In lieu of a description, the applicant may provide a copy of the appropriate document. State the reasons that the Department suspended, revoked, or denied a permit/permit application or license/license application filed by the applicant or any related party, identified in Sections A or B.

Note: Violations and enforcement actions are described in the "Instructions for Form C", Item

See Attached Listing

### 2. Compliance History Outside Pennsylvania:

Describe any violations (as described by Item 6 of the "Instructions for Form C") of the Environmental Protection Acts committed by the applicant or any person or related party identified in Section A or B occurring outside the Commonwealth. Provide the dates of the action, and the date, location, and nature of the underlying violation. Dates of convictions or pleas shall also be provided. In lieu of a description, the applicant may provide a copy of the appropriate document. For license or permit revocations/suspensions/denials, the reasons for the action shall be specifically stated.

<u>Date</u>	<u>Location</u>	<u>Description</u>	<u>Penalty</u>	<u>*See</u>
7/26/88	Claymont, DE	Oil Spill from Drain Backed Up	\$1,000	Below

[Note: For corporate applicants which are publicly traded, are diversified and have done business in Pennsylvania long enough to provide an in-state basis for evaluating compliance history, Item D.2 may be answered through the submission of SEC 10K reports for the past five years, a current proxy statement, and any corporate statements or directives which articulate the corporation's position with regard to compliance with environmental laws in general or solid waste management laws in particular. Any applicant who wishes to make such submission in response to Item D.2 should ask for further instructions from the Department office to which the permit or license application is being submitted.]

<u>Date</u>	<u>Location</u>	<u>Description</u>	<u>Penalty</u>
1/25/88	Claymont, DE	Loss of Power/Sump Overflow	\$ 250

FORM C

I (we) hereby certify that I (we) have the authority to respond to the above questions on behalf of the applicant, and that the information provided herein is true and correct to the best of my (our) knowledge, information and belief.

H. S. Roe, Jr.  
(Signature)

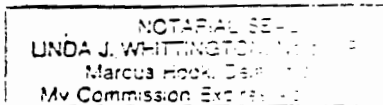
Name: H. S. Roe, Jr.  
(Print or Type Name)

Title: Vice President, Operations  
(Print or Type Title)

Social Security No.: 144-36-8236

Sworn to and subscribed before me this  
17<sup>th</sup> day of August

19 90  
Linda J. Whittington  
Notary Public



Carol L. Guard  
(Signature)

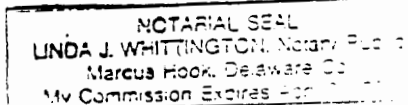
Name: Carol L. Guard  
(Print or Type Name)

Title: Corporate Secretary  
(Print or Type Title)

Social Security No.: 165-40-4152

Sworn to and subscribed before me this  
17<sup>th</sup> day of August

19 90  
Linda J. Whittington  
Notary Public



\_\_\_\_\_  
Affix Corporate Seal:

(For Corporations, see the Instructions, Item 9, regarding corporate seal and signatures.)

DECEMBER 21, 1989

COMPANY: 00666

UNIT: SUN REFINING & MKTG

SUN REFINING AND MARKETING COMPANY

(FORMERLY SUN OIL COMPANY OF PENNSYLVANIA - NAME  
CHANGED ON OCTOBER 28, 1981)

DIRECTORS AND OFFICERS:  
-----

R.H. CAMPBELL (ROBERT)

DIRECTOR

~~J.V.D. FEAR~~

~~DIRECTOR~~

*resigned 12/31/90*

D.E. KNOLL (DAVID)

DIRECTOR

R. MCCLEMENTS, JR. (ROBERT)

DIRECTOR

H.S. ROE, JR. (HARWOOD)

DIRECTOR

\* P.F. WAITNEIGHT (PETER)

DIRECTOR

R.H. CAMPBELL (ROBERT)

CHAIRMAN OF THE BOARD

D.E. KNOLL (DAVID)

PRESIDENT

H. ALONSO (HERIBERTO)

VICE PRESIDENT

P.E. COGGINS, JR. (PATRICK)

VICE PRESIDENT

J.L. FOLTZ (JACK)

VICE PRESIDENT

K.D. HILL (KENNETH)

VICE PRESIDENT

J.D. MAZZEI (JOSEPH)

VICE PRESIDENT

E.J. MEYER (EDWARD)

VICE PRESIDENT

N.J. NEUHAUSEL (NICHOLAS)

VICE PRESIDENT

E.V. OSBORNE (EDWARD)

VICE PRESIDENT

H.H. PAGE, JR. (HENRY)

VICE PRESIDENT

T.D. PATRICK (DANIEL)

VICE PRESIDENT

D.C. RIPPY (DAVID)

VICE PRESIDENT

H.S. ROE, JR. (HARWOOD)

VICE PRESIDENT

J.J. SHANNON (JAMES)

VICE PRESIDENT

DECEMBER 21, 1989  
COMPANY: 00666

UNIT: SUN REFINING & MKTG  
SUN REFINING AND MARKETING COMPANY  
(FORMERLY SUN OIL COMPANY OF PENNSYLVANIA - NAME  
CHANGED ON OCTOBER 28, 1981)

DIRECTORS AND OFFICERS:  
-----

W.S. SMITH, JR. (WILLIAM)	VICE PRESIDENT
S.L. THOMPSON (SHELDON)	VICE PRESIDENT
P.F. WAITNEIGHT (PETER)	VICE PRESIDENT
D.M. ZEBLEY (DAVID)	VICE PRESIDENT
C.L. GUARD (CAROL)	SECRETARY
T. BROWNLIE, JR. (THOMAS)	ASSISTANT SECRETARY
G.R. HUTCHINSON (RANDALL)	ASSISTANT SECRETARY
J.J. MCKEEVER (JOHN)	ASSISTANT SECRETARY
C.G. SCHANZ (CHARLES)	ASSISTANT SECRETARY
R.L. CARTLIDGE (RICHARD)	CONTROLLER
R.H. MEREDITH (ROBERT)	ASSISTANT CONTROLLER
R.L. CARTLIDGE (RICHARD)	TREASURER
G.R. HUTCHINSON (RANDALL)	ASSISTANT TREASURER
J.J. MCKEEVER (JOHN)	ASSISTANT TREASURER
W.B. PRIESTLEY (WILLIAM)	ASSISTANT TREASURER
B.H. ROSENBERG (BARRY)	ASSISTANT TREASURER
J.A. RUDDY, JR. (JOHN)	ASSISTANT TREASURER

QUESTION C.1:

APPLICANT'S PLACE OF BUSINESS

Sun Refining and Marketing Company  
Marcus Hook Refinery  
Delaware Avenue & Green Street  
Marcus Hook, Penna. 19061  
PAD 980 550 594

Sun Refining and Marketing Company  
Read-Boyd Farm  
Route 452  
Linwood, Upper Chichester, Penna. 19061  
PAD 000 647 438

Sun Refining and Marketing Company  
#2 Tank Farm  
Routes 322 and 452  
Twin Oaks, Aston, Penna. 19014  
PAD 000 647 446

Sun Refining and Marketing Company  
#3 Tank Farm  
Naamans Creek Road  
Bethel Township, Penna. 19061  
PAT 000 647 453

REW:rwg  
8/7/90  
EE1020

## QUESTION C.2:

## PaDER PERMITS/LICENSES

I. AIR

<u>SOURCE</u>	<u>PERMIT NO.</u>	<u>EXPIRATION</u>	<u>NOTES</u>
CO Boiler #2	23-302-044	6/30/93	Out of Service
Plt.8-C Proc.Htr.	23-302-044	6 30/93	
Plt.15-5 Pr.Htr.(3)	23-302-044	6/30/93	Prev.23-312-032
Plt.15-1 Proc.Htr.	23-302-075	6/30/93	Prev.23-302-075
Plt.12-3 Vac.Htr.	23-302-120	6/30/93	Prev.23-302-120
Plt.12-3 Proc.Htr.	23-312-170	6/30/93	
CPI Separator	23-312-029	11/12/81	Inactive
Underground Cav.	23-312-042	11/12/78	Inactive
St.Tank #101	23-312-044C	5/31/93	
St.Tank #230	23-312-044C	5/31/93	Prev.23-312-133
St.Tank #237	23-312-044C	5/31/93	Prev.23-312-134
St.Tank #242	23-312-044C	5/31/93	
St.Tank #246	23-312-044C	5/31/93	
St.Tank #248	23-312-044C	5/31/93	
St.Tank #249	23-312-044C	5/31/93	
St.Tank #250	23-312-044C	5/31/93	
St.Tank #252	23-312-044C	5/31/93	
St.Tank #255	23-312-044C	5/31/93	Prev.23-312-044A
St.Tank #320	23-312-044C	5/31/93	Prev.23-312-168
St.Tank #344	23-312-044C	5/31/93	Prev.23-312-047
St.Tank #347	23-312-044C	5/31/93	Prev.23-312-140
St.Tank #348	23-312-044C	5/31/93	Prev.23-312-141
St.Tank #349	23-312-044C	5/31/93	Prev.23-312-142
St.Tank #353	23-312-044C	5/31/93	Prev.23-312-046
St.Tank #354	23-312-044C	5/31/93	Prev.23-312-143
St.Tank #355	23-312-044C	5/31/93	Prev.23-312-144
St.Tank #357	23-312-044C	5/31/93	Prev.23-312-044B
St.Tank #358	23-312-044C	5/31/93	Prev.23-312-044B
St.Tank #383	23-312-044C	5/31/93	Prev.23-312-135
St.Tank #385	23-312-044C	5/31/93	Prev.23-312-136
St.Tank #387	23-312-044C	5/31/93	Prev.23-312-137
St.Tank #389	23-312-044C	5/31/93	Prev.23-312-138
St.Tank #390	23-312-044C	5/31/93	Prev.23-312-139
St.Tank #443	23-312-044C	5/31/93	
St.Tank #452	23-312-044C	5/31/93	
St.Tank #467	23-312-044C	5/31/93	
St.Tank #524	23-312-044C	5/31/93	
St.Tank #491	23-312-044C	5/31/93	
St.Tank #593	23-312-044C	5/31/93	Prev.23-312-055
St.Tank #598	23-312-044C	5/31/93	
St.Tank #599	23-312-044C	5/31/93	
St.Tank #610	23-312-044C	5/31/93	
St.Tank #611	23-312-044C	5/31/93	
St.Tank #F23	23-312-044C	5/31/93	Prev.23-312-158
Ground Flare	23-312-045	Temporary	Reapply ea. use
CPI Separator	23-312-050	11/12/81	Inactive
Fume Incinerator	23-312-051	1/9/78	Inactive

QUESTION C.2PaDER PERMITS/LICENSESI. AIR (CONT.)

<u>SOURCE</u>	<u>PERMIT NO.</u>	<u>EXPIRATION</u>	<u>NOTES</u>
API Sep. #9 ABC	23-312-052	5/31/93	Out of Service
API Sep. #10 AB	23-312-052	5/31/93	Prev. 23-312-145
API Sep. #15 AB	23-312-052	5/31/93	Prev. 23-312-146
API Sep. #16 ABC	23-312-052	5/31/93	Prev. 23-312-147
BTX Trk. Unloading	23-312-053	9/30/91	
St. Tank #316	23-312-071	8/31/93	Prev. 23-312-071
St. Tank #317	23-312-071	8/31/93	Prev. 23-312-072
St. Tank #323	23-312-071	8/31/93	Prev. 23-312-108
St. Tank #324	23-312-071	8/31/93	Prev. 23-312-109
St. Tank #327	23-312-071	8/31/93	Prev. 23-312-110
St. Tank #328	23-312-071	8/31/93	Prev. 23-312-111
St. Tank #329	23-312-071	8/31/93	Prev. 23-312-112
St. Tank #331	23-312-071	8/31/93	Prev. 23-312-113
St. Tank #333	23-312-071	8/31/93	Prev. 23-312-114
St. Tank #321	23-312-071	8/31/93	Prev. 23-312-127
St. Tank #1	23-312-088	8/26/81	Inactive
St. Tank #2	23-312-089	8/26/81	Inactive
St. Tank #3	23-312-090	8/26/81	Inactive
St. Tank #4	23-312-091	8/26/81	Inactive
St. Tank #332	23-312-096	8/26/81	Inactive
Banking-Tk. #312	23-312-149	8/31/86	Inactive
313, 317, 325 & 326			
Gasoline Loading	23-312-169	6/30/94	
Banked Emissions	23-325-003		Expired
Cogeneration Unit	23-399-018	3/31/91	
Opacity CEM, FCCU	CEMS 1582		

II. WATER

<u>DESCRIPTION</u>	<u>NUMBER</u>	<u>EXPIRATION</u>
Water Quality Mgmt.		
PPH -Upper #1 Tk. Farm	2375203	Issued 11/76
-Refinery	2379202	Issued 6/81
-#2 Tk. Farm	2379203	Issued 1/81
Sanitary Wastewater	1172	N/A
Sanitary Wastewater	870	N/A
Sanitary Wastewater	512	N/A
NPDES	PA0011096	6/25/91
	(Renewed 6/25/86)	

QUESTION D.1.a.b.f.:INCIDENT SUMMARYI. AIR

	<u>DESCRIPTION</u>	<u>FINE</u>
1/6/75	Particulate Emissions	2,000
2/10/75	Particulate Emissions	2,000
3/13/75	Particulate Emissions	2,000
4/15/75	Particulate Emissions	2,000
7/76	Particulate Emissions	2,000
8/76	Particulate Emissions	2,000
10/76	Benzene Loading	40
8/78	Particulate Emissions	2,000
7/20/78	Particulate Emissions	16,000
9/27/78	Particulate Emissions	14,000
10/27/78	Particulate Emissions	4,000
11/13/78	Particulate Emissions	2,000
8/22/80	Particulate Emissions	28,000
1/8/79	Particulate Emissions	2,000
2/9/79	Particulate Emissions	2,000
4/9/79	Particulate Emissions	6,000
4/20/79	Particulate Emissions	3,000
5/18/79	Particulate Emissions	3,000
2/20-3/1/79	Particulate Emissions	1,110
7/3/79	Particulate Emissions	3,000
7/17/79	Particulate Emissions	3,000
10/31-11/6/81	Particulate Emissions	2,100
7/8/83	Sulfur Dioxide Emissions	23,630
3/6/86	Opacity Noncompliance	1,000
9/30/85	Opacity Noncompliance	3,000
4/22/86	Opacity Noncompliance	2,000
10/10/86	Opacity Noncompliance	500
12/23/86	Opacity Noncompliance	3,000
12/31/86	Opacity Noncompliance	3,357
2/13/87	Benzene VOC Noncompliance	18,000
1/28/87	Opacity Noncompliance	1,000
1/29/87	Opacity Noncompliance	1,000
4/1/87	Opacity Noncompliance	423
5/18/87	Sulfur Dioxide Emissions	10,250
2/19/88	Sulfur Dioxide Emissions	17,271
3/14/88	Smoking Flares	2,500
5/16/88	Sulfur Dioxide Emissions	18,467
6/28/88	Sulfur Dioxide Emissions	6,070
7/20/88	Sulfur Dioxide Emissions	9,800
7/25/88	Sulfur Dioxide Emissions	644
8/4/88	Sulfur Dioxide Emissions	3,430
8/29/88	Acid Vapors	1,485
10/21/88	Sulfur Dioxide Emissions	41



QUESTION D.1.a.b.f.: INCIDENT SUMMARY (CONT.)

I. AIR (CONT.)

<u>DATE</u>	<u>DESCRIPTION</u>	<u>FINE</u>
10/26/88	Sulfur Dioxide Emissions	1,500
11/22/88	Vent Not Properly Controlled	40,000
1/12/89	Sulfur Dioxide Emissions	1,515
1/23/89	Sewer Vapors	2,000
1/23/89	Sulfur Dioxide Emissions	2,400
4/10/89	Sulfur Dioxide Emissions	1,577
5/8/89	Particulate Emissions	3,000
7/3/89	Sulfur Dioxide Emissions	3
8/20/89	Particulate Emissions	10,000
10/17/89	Sulfur Dioxide Emissions	608

II. WATER

<u>DATE</u>	<u>DESCRIPTION</u>	<u>FINE</u>
8/7/74	Ocean Dumping	1,750
7/30/76	Benzene Truck Loading	2,000
9/13/76	Benzene Truck Loading	270
11/22/78	Spill to Middle Creek	100
5/2/79	Fish Kill (Read-Boyd Farm)	300
3/2/80	Acidic Discharge (DELCORA)	2,500
11/24/80	NPDES Fine per Consent Order	1,000
12/1/80	Original Consent Order	85,700
1981	NPDES Noncompliances	6,800
1982	NPDES Noncompliances	6,400
1983	NPDES Noncompliances	6,700
1984	NPDES Noncompliances	3,400
1985	NPDES Noncompliances	2,300
1986	NPDES Noncompliances	405,000
1987	NPDES Noncompliances	22,800
1988	NPDES Noncompliances	59,000
1/25/88	Loss of Power-Sump Overflow to River	250
4/24/88	Dock Drain Fan Overflowed	250
8/3/88	Line Spill at Dock	200
11/4/88	Spill to Middle Creek	750

QUESTION D.1.a.b.f.:      INCIDENT SUMMARY

III.      ASBESTOS

<u>DATE</u>	<u>DESCRIPTION</u>	<u>FINE</u>
1/14/80	Plant 15-2A	700
9/26/80	Plant 15	500
10/31/80	Plant 17	700

REW:rwg:8/7/90  
EE1020-I

CENTRAL OFFICE

DESK MEMORANDUM

SUBJECT

File: Marcus <sup>Holt</sup><sub>Bird</sub>  
Delaware Co.

Sun Marketing + Refining - Benzene Spill

TO Files

FROM M. Stoltz

DATE SENT 3/15/88

DATE NEEDED

PLEASE CALL:	APPROVAL	SEE ME
RETURNED YOUR CALL	AS REQUESTED	COMMENT
INFORMATION	PREPARE REPLY/REPORT	NOTE AND FILE

RECEIVED BY

DATE

TIME

ROUTE	INITIAL	DATE	ROUTE	INITIAL	DATE

MESSAGE

Spoke to Ted Grabowski regarding results of Sun's investigation into benzene spill which occurred 2/9/88.

Ship responsible for telling Sun when to stop pumping. Standard Operating Procedure: 1 hr prior to fill ship notifies Sun so they can line up people for lab testing prior to ship departure. ~15 min prior to fill ship notifies Sun to have someone stand by shut off valve. Notification was never received. Hose watchmen standing by at shed. Someone noticed smell of benzene. Hose watchmen shut off valve. 361 barrels (42 gallons/barrel) spilled to Delaware.

Automatic Shutoff on barge in operable. No nitrogen burnisters.

Sun initiated clean-up. Have verbal agreement Mustcraft Inc. to pay for clean-up.

Report to be issued to DEP/EPA delayed by PFC action.

[illegible]

TIME 1030

WOS 4/27/87

# WATER DISCHARGE INSPECTION REPORT

**CENTRAL OFFICE**

ER BWQ-32 REV. 4-77  
NOTE: SEE COPY 2  
BEFORE SIGNING

PA

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT  
WASTE DISCHARGE INSPECTION REPORT

D. 1072

DATE 4/24/87  
TIME 1000

ESTABLISHMENT Sun Oil Co.	CASE Dock #1+2 Leak	LOCATION (STREET/STATE ROUTE)	COUNTY DELAWARE	MUNICIPALITY Marcus Hook	PROGRAM I.W.
OPERATOR NAME	VALID CERTIFICATE POSTED YES <input type="checkbox"/> NO <input type="checkbox"/>	TELEPHONE NO. 447-1000	POP SERVED	ACRES UNDER PERMIT	ACRES ALREADY MINED
RESPONSIBLE OFFICIAL Joseph D. Mazzei, Rep Man	ADDRESS Box 426 Marcus Hook, Pa. 19061	TELEPHONE NO. 447-1176	INDUSTRIAL PRODUCTS		
PERSON INTERVIEWED Ted Garbowski, ENVR. ENG.	ADDRESS	TELEPHONE NO.	1.	2.	

TREATMENT PROCESS	NUMBER OF MONITORING POINTS		REMARKS	VIOLATIONS
	TOT	IN OP		
			INSPECTION OF #2 DOCK REVEALED A 10" TRANSFER LINE LEAKING #2 FUEL AND LUBRICATING OILS. FURTHER INVESTIGATION OF THE 10" AND OTHER LINES WILL CONTINUE DUE TO THE CONSTANT ACCUMULATION OF OIL IN THE OPEN PITS. A LARGE LINE LEAK OCCURRED BY THE BULK HEAD LAST WEEK, ACCORDING TO THE REPORT THE PROBLEM MIGHT BE DUE TO THIS LEAK OR POSSIBLY SEVERAL SMALL LEAKS. SAMPLES COLLECTED AND GRAVITY INDICATES FURNACE OR HEATING OILS. SNOB ENVIRONMENTAL CONTRACTED FOR CLEAN-UP, AN ESTIMATED 25,000 GALS PUMPED SO FAR. ALL CONTAMINATED SOIL SCHEDULED FOR DISPOSAL AT FONDERSY LANDFILL IN OHIO. PRESENTLY SOILS DEPOSED. AS THE INVESTIGATION CONTINUES LEAKS WILL BE DISCOVERED SEEPING FROM UNDER #1 DOCK	UNPERMITTED DISCHARGE OF FUEL OIL TO THE DEL. R.V.  FEDERAL REQUIREMENTS  LAWS, REGULATIONS OR PERMIT NO. & CONDITIONS CLEAN STREAMS LAW DISCONTINUED

SAMPLING POINT	W&W QUALITY REPORT NUMBER	PH	CHLOR RES	COLOR	ODOR	TEMP	D.O.	SPEC COND.	AVG. DAILY FLOW (MGD)	RECEIVING STREAM APPEARANCE	
										NAME	ABOVE DIS APP BELOW DIS APP
										DELAWARE R.V.	CL 0.1 SMA

IDENTIFICATION						FAC NO. 1	FAC NO. 2	FAC NO. 3	FAC NO. 4	DATE OF INSPECTION	INSPECTING AGENCY
C	CO	MUN	T	EST	CASE						
1 C	4-5	6-8	9	10-11	12-13	14-16	14-16	14-16	14-16	17-22	23-25
2 A											
3 X										042487	761

FACILITY NAME	DIS. VOL. (MGD)	COMPLIANCE				PERMIT COMP	OPER STAT				
		FED	INT	FAC	OP						
		49-52	66	67	68			69	70	71-72	
1											
2											
3											
4											

PERSON INTERVIEWED (SIGNATURE)  
4/24/87  
TITLE AND DATE  
INVESTIGATOR (SIGNATURE)  
WQS 4/24/87  
TITLE AND DATE



USE BLACK INK ONLY) CENTRAL OFFICE

ESTABLISHMENT <i>SUN OIL</i>	CASE <i>MARCUS Hook REFINERY</i>	LOCATION (STREET/STATE ROUTE)	COUNTY <i>DELAWARE</i>	MUNICIPALITY <i>MARCUS Hook</i>	PROGRAM <i>I. C.</i>
OPERATOR NAME <i>NA</i>	VALID CERTIFICATE POSTED YES <input type="checkbox"/> NO <input type="checkbox"/>	TELEPHONE NO.	POP SERVED	ACRES UNDER PERMIT	ACRES ALREADY MINED
RESPONSIBLE OFFICIAL <i>ART Raymond</i>	ADDRESS <i>P.O. Box MARCUS Hook, Pa. 19061</i>	TELEPHONE NO. <i>447-1176</i>	INDUSTRIAL PRODUCTS		
PERSON INTERVIEWED <i>TED GRABOWSKI</i>	ADDRESS	TELEPHONE NO.	1. <i>PETROLEUM PRODUCTS</i>	2.	

TREATMENT PROCESS	NUMBER		REMARKS	VIOLATIONS
	TOT.			
			REPORT WRITTEN AS A RESULT OF A FIRE AT THE SUN MARCUS Hook REFINERY STARTING AT 10:00 am. A WELDER WAS WORKING ON THE CONSTRUCTION OF A CEMENT WEIR AND A SPARK HIT THE OILY SURFACE ON THE BAYON CONTAMINATED SIDE OF MIDDLE CRK. PUMPING OF THE CONTAMINATED TO DELCORA WAS STOPPED AND THE DISCHARGE OF THE #15 SEPARATOR WAS ALLOWED TO DISCHARGE TO MIDDLE CRK. THE PUMPING TO DELCORA WAS STOPPED DUE TO NOT WANTING TO SEND HOT OIL TO THEIR TREATMENT. THE DISCHARGE FROM #15 SEPARATOR WOULD NORMALLY GO TO THE CONTAMINATED SIDE OF MIDDLE CRK BUT THIS DISCHARGE WAS INTERFERING WITH THE FOAM SUPPRESSANT BEING APPLIED BY THE FIRE CO. SO #15 SEPARATOR DISCHARGE WAS DIVERTED. THIS BY-PASSING TOOK PLACE FROM ± 10:15 am TO 1:00 pm AT ABOUT 600 GPM.	ILLEGAL DISCHARGE (#15 SEPARATELY)
				LAWS, REGULATIONS OR PERMIT NO. & COND NPDES

[illegible]

IDENTIFICATION						FAC NO. 1	FAC NO. 2	FAC NO. 3	FAC NO. 4	DATE OF INSPECTION	INSPECTING AGENCY	
1	C	CO	MUN	T	EST	CASE						
2	A	4-5	6-8	9	10-11	12-13	14-16	14-16	14-16	17-22	23-25	
3	X									1 2 / 6 8 5	7 0 1	PERSON INTERVIEWED (SIGNATURE)

FACILITY NAME						DIS. VOL. (MGD)				COMPLIANCE				PERMIT COMP	OPER STAT	TITLE AND DATE
										FED	INT	FAC	OP			
						49-52	66	67	68	69	70	71-72		INVESTIGATOR (SIGNATURE)		
1														<i>[Signature]</i>	<i>Nov 10/85</i>	
2														<i>EART ENG</i>	<i>12/16/85</i>	
3														<i>Ruthm. Pilant</i>		
4														<i>H.P.S.</i>	<i>12-16-85</i>	

**NOTE: SEE COPY 2  
BEFORE SIGNING**

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT  
WASTE DISCHARGE INSPECTION REPORT

DATE 2-6-85

TIME 11:20

ESTABLISHMENT <b>SUN REFINERY</b>	CASE # <b>Cmp# 016+017</b>	LOCATION (STREET/STATE ROUTE) <b>GREEN ST. + DELAWARE AVE</b>	COUNTY <b>DELA.</b>	MUNICIPALITY <b>MARCUS Hook</b>	PROGRAM <b>1W</b>
OPERATOR NAME <b>N.A.</b>	VALID CERTIFICATE POSTED YES <input type="checkbox"/> NO <input type="checkbox"/> <b>N.A.</b>	TELEPHONE NO.	POP SERVED	ACRES UNDER PERMIT	ACRES ALREADY MINED
RESPONSIBLE OFFICIAL <b>Art Raymond</b>	ADDRESS	TELEPHONE NO.	INDUSTRIAL PRODUCTS		
PERSON INTERVIEWED <b>Ted Grabowski</b>	ADDRESS	TELEPHONE NO. <b>447-1176</b>	1. <b>Petroleum PRODUCTS</b>	2. <b>←</b>	

TREATMENT PROCESS	NUMBER OF UNITS		REMARKS	VIOLATIONS
	TOT	IN OP		
			<p>Sunny, cold</p> <p>THE SPILL FROM SEPARATOR IS C,D+E APPARENTLY WAS CAUSED BY A ZAKY SKIMMER LINE THAT ENABLED SKIMMED OIL/WATER TO FLOW BACKWARDS INTO LINES C,D+E FROM A+B. THIS SUSPECTED BACKFLOW CAUSED BY A SLIGHTLY HIGHER HEAD IN A+B THAN C,D+E. SOUTH JERSEY IS STILL ON SITE PUMPING PRODUCT FROM C,D+E. THE AFFECTED MATERIAL IN THE <del>POOL</del> FILTER FENCE + THE TWO BOOMS UPSTREAM FROM THERE HAVE BEEN REPLACED. OIL SHEEN IS VISIBLE ON MIDDLE CK ABOVE FILTER FENCE.</p> <p>THE POST RD. SPILL APPEARS TO HAVE BEEN CAUSED BY THE THAW ON 2/1. THAT CAUSED OIL OF UNKNOWN ORIGIN <del>TO</del> IN THE UNDERGROUND ELECTRICAL CONDUITS TO BE DISPLACED &amp; ULTIMATELY COME OUT OF A MANHOLE NEAR POST RD. THE SOURCE OF THE OIL &amp; WATER IS STILL BEING INVESTIGATED. SUBMIT TO THIS OFFICE A FINAL REPORT ON THESE TWO SPILLS ENTAILING CAUSE, DURATION, METHOD OF ELIMINATION</p>	<p>1.) Unpermitted DISCHARGE</p> <p><del>1.) Pa. CLEAN STREAM LAW</del></p>

[illegible][illegible]

FACILITY NAME						DIS. VOL. (MGD)				COMPLIANCE				PERMIT COMP	OPER STAT	TITLE AND DATE
										FED	INT	FAC	OP			
						49-52	66	67	68	69	70	71-72	INVESTIGATOR (SIGNATURE)			
1														B. McFarman		
2														WQS		
3														E-6-85		
4																

NOTE: SEE COPY 2  
BEFORE SIGNING

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT  
WASTE DISCHARGE INSPECTION REPORT

Pg 2 of 2

DATE 7-26-84  
TIME ~12:30

ESTABLISHMENT <b>Sun Oil</b>	CASE <b>Refinery</b>	LOCATION (STREET/STATE ROUTE) <b>Delaware Ave + Green St. Delaware</b>	COUNTY <b>Delaware</b>	MUNICIPALITY <b>Marshalltown</b>	PROGRAM <b>110</b>
OPERATOR NAME <b>—</b>	VALID CERTIFICATE POSTED YES <input type="checkbox"/> NO <input type="checkbox"/> <b>N.A.</b>	TELEPHONE NO. <b>—</b>	POP SERVED <b>—</b>	ACRES UNDER PERMIT <b>—</b>	ACRES ALREADY MINED <b>—</b>
RESPONSIBLE OFFICIAL <b>H.G. Johnson Ref Mgr.</b>	ADDRESS <b>Same as page 1</b>	TELEPHONE NO. <b>—</b>	INDUSTRIAL PRODUCTS <b>1. petroleum 2. refining</b>		
PERSON INTERVIEWED <b>Bob Rowe</b>	ADDRESS <b>Same as page 1</b>	TELEPHONE NO. <b>—</b>			

TREATMENT PROCESS	NUMBER OF UNITS		REMARKS	VIOLATIONS
	TOT	IN OP		
intense storm.			this due to flooding of Middle Creek during intense storm. 9 separators know discharging via 14 separator line + diverted to Middle Creek behind dam. 14 separators not in service. Flight skimmer on 9 sep. not level. Ground around 9 sep. saturated w/ oil. Large diameter pipe in ground ahead of 9 sep. - recovery of oil back (seep) of oil from corner of D10 sep. Continues to appear that one separator has leak as seep is not as bad when this separator not in service. Oil in creek because of this - <del>separators</del> oil picked up behind dam.	
			these skimmers are not being used. Flooding level over the skimmers so that collection skimmer is used.	

SAMPLING POINT	W&W QUALITY REPORT NUMBER	pH	CHLOR RES	COLOR	ODOR	TEMP	D.O.	SPEC COND.	AVG. DAILY FLOW (MGD)	RECEIVING STREAM APPEARANCE		
										NAME	ABOVE DIS APP	BELOW DIS APP

IDENTIFICATION						FAC NO. 1	FAC NO. 2	FAC NO. 3	FAC NO. 4	DATE OF INSPECTION	INSPECTING AGENCY
1	C	CO	MUN	T	CASE	14-16	14-16	14-16	14-16	17-22	23-25
2	A	4-5	6-8	9	10-11					072684	WQ1
3	X										

FACILITY NAME	DIS. VOL. (MGD)	COMPLIANCE				PERMIT COMP	OPER STAT
		FED	INT	FAC	OP		
	49-52	66	67	68	69	70	71-72
1							
2							
3							
4							

PERSON INTERVIEWED (SIGNATURE)  
**Robert B. Rowe**  
TITLE AND DATE  
**Compliance Specialist**  
INVESTIGATOR (SIGNATURE)  
**Cynthia Steele**  
TITLE AND DATE  
**WQS 7/26/84**

Mastercraft Inc.

George Fowler - President + Dispatcher  
has ~~about~~ 9 employees

521-3675

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region III - 600 E. Main St.

Philadelphia, PA 19106

SUBJECT: RCRA Inspection - *SUN REFINING & MARKETING CO.*  
*MARCUS HOOK, PA.*

DATE: *11/5/87*

FROM: *PAID 980530594*  
*gk* Gregory A. Koltonuk, Environmental Scientist  
RCRA Enforcement Section (3HW11)

TO: File  
*JOSEPH KOTLINSKI* *JK*  
Thru: ~~JOSEPH KOTLINSKI~~, Chief  
RCRA Enforcement Section (3HW11)

THE STATE IS TAKING ACTION TO RESOLVE THE VIOLATIONS IN THIS  
INSPECTION REPORT.

WE WILL MONITOR THE STATE ACTIVITY REGARDING RESOLUTION OF THESE  
VIOLATIONS.

HAZARDOUS WASTE INSPECTION REPORT  
Generators - Part A

10/22

E.P.A.

Date of inspection October 15, 1987 Time start 9:00 Time finish 12:00  
Name of inspector Brian K. Boyd  
Company, installation name Sun Refining + Marketing Co. Inc.  
Location Delaware Ave + Green St.  
County Delaware Municipality Marcus Hook Boro  
Identification number PAD 980550594  
Name of responsible official Arthur Raymond  
Title Mgr. Environmental Engineering  
Mailing address P.O. Box 426, Marcus Hook, Pa 19061  
Area code and phone no. (615) 447-1176  
Name of person interviewed Richard Ware  
Title Sr. Environmental Engineer Specialist  
Mailing address (if different from above) Same  
Area code and phone no. Same

1. Current waste handling method:

- a. ☒ On-site ☒ treatment, ☒ storage, ☐ disposal  
b. ☒ On-site ☐ use, ☐ reuse, ☒ recycle, ☒ reclaim  
c. ☐ Off-site ☐ treatment, ☐ storage, ☐ disposal  
d. ☐ Off-site ☐ use, ☐ reuse, ☐ recycle, ☐ reclaim

2. Amount of hazardous waste produced:

- a. 1987 - 505 tons <sup>6</sup> ☒ mo.  
+ 7 tons  
b. 512 kg./yr.

Received from outside  
TSD Treatment (not calculated)

3. Types of hazardous waste produced by Hazardous Waste Number:

K051 }  
K049 } Delisted  
D001, D008, F002

4. Are hazardous wastes transported off-site by the generator? ☐ Yes ☒ No

HAZARDOUS WASTE INSPECTION REPORT  
Generators - Part B

1- NON-COMPLIANCE, 2- COMPLIANCE, 3- NOT APPLICABLE, 4- NOT DETERMINED

COMPLIANCE STATUS				REQUIREMENT	CHAPTER CITATION
1	2	3	4		
					75.262
✓				Identification number	(c) (1)
✓				Hazardous waste shipments offered only to licensed transporters	(e) (4)
✓				Authorization received from TSD facility for wastes shipped off-site	(d)
✓				PA manifest used for intrastate shipments	(c) (1) (i)
✓				Disposer state manifest or EPA format manifest used for out-of-state shipments	(c) (1) (iii)
✓				Manifests filled out properly and completely	(c) (1)
✓				Manifests routed properly and within time limits (24 hours)	(c) (2)
✓				Proper U.S. DOT shipping containers or packages	(f) (1) (i)
✓				Shipping containers marked and labeled according to U.S. DOT	(f) (1) (iii)
	✓			Containers of 110 gal. or less marked with required PA label <i>None</i>	(f) (1) (iii)
✓		✓		Placards offered to transporter	(f) (2)
	✓			Wastes accumulated on-site for less than 90 days <i>Storage Part B</i>	(g) (1)
	✓			Wastes stored in proper containers and properly marked and labeled	(g) (1) (ii)
	✓			Containers managed in accordance with 75.265(g) <i>No Containers stored in</i>	(g) (1) (iii)
	✓			Containers clearly marked with accumulation date and visible for inspection <i>Storage area</i> <i>All waste stored in bulk.</i>	(g) (1) (iv)
✓				Records retained at designated location for 20 years	(h)
✓				Quarterly reports submitted to the Department	(i)
	✓			Exception reporting procedures followed	(j)
		✓		Hazardous waste disposal plan, if required	(l)
				Spill reporting procedures followed	(m) (1)
✓				Preparedness, Prevention and Contingency Plan approved and implemented	(m) (5)
	✓			Special requirements followed for international shipments	(o)
✓				Personnel training program 265 <i>Computerized</i>	(f)
				Personnel training program annual review 265	(f) (5)
	✓			Drums labeled during storage to accurately identify contents Act 97 Section 403	(b) (2)
	✓			Facility operated to minimize the possibility of fire, explosion, or discharge of HW to air, soil, surface water, or ground water	265 (h)



of Inspection October 15, 1987 Identification Number PAD 980550554  
ny, Installation Name Sun Refining & Marketing  
y Delaware Municipality Marcus Hook Boro

See TSD Comment Sheet.

Inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Solid Waste Management, inspected the above installation. Findings of this inspection are shown in this report. Any violations which were uncovered by the inspection are indicated. Violations may also be discovered upon examination of results of laboratory analyses and review of Department records. Notification will be coming, confirming any violations indicated herein and listing any additional violations.

Interviewed (signature) Richard E. Jace Date 10/15/87  
Director (signature) William K. Borge Date 10/15/87

HAZARDOUS WASTE INSPECTION REPORT  
TSD Facilities - Part A

Date of inspection October 15, 1987 Time start 9:00 Time finish 12:00  
Name of inspector Brian K. Boyd  
Company, installation name Sun Refining + Marketing Co., Inc.  
Location Delaware Ave + Green St.  
County Delaware Municipality Marcus Hook Boro  
Identification number PAD 980550594  
Name of responsible official Arthur Raymond  
Title Mgr. Environmental Engineering  
Mailing address P.O. Box 426, Marcus Hook, Pa. 19061  
Area code and phone no. (215) 447-1176  
Name of person interviewed Richard Ware  
Title Sr. Environmental Engineer Specialist  
Mailing address (if different from above) Same  
Area code and phone no. \_\_\_\_\_

1. Site characterization:

- a. ☒ Treatment - ☐ surface impoundments, ☒ chemical, ☒ physical, ☐ biological  
b. ☒ Storage - ☐ containers, ☒ tanks, ☐ surface impoundments, ☐ waste piles  
c. ☐ Disposal - ☐ land treatment, ☐ landfill, ☐ incineration, ☐ thermal treatment  
d. ☐ Use, ☐ reuse, ☐ recycle, ☐ reclaim

2. Does the facility generate hazardous wastes? ☒ Yes ☐ No

3. Types of hazardous waste produced by Hazardous Waste Number:

K049  
K051

4. Are hazardous wastes transported off-site by the facility? ☐ Yes ☒ No

1- NON-COMPLIANCE, 2- COMPLIANCE, 3- NOT APPLICABLE, 4- NOT DETERMINED					ED	CHAPTER CITATION
COMPLIANCE STATUS					REQUIREMENT	75.265
1	2	3	4			
	✓				Part A permit application submitted.	(a) (2), (z)
	✓				Identification number.	(b)
	✓				Wastes accepted at facility transported by haulers licensed to transport hazardous waste by the Department.	(b) (1)
					Waste streams not covered by permit approved by the Department before acceptance	(c) (1)
					Chemical and physical analyses repeated as required.	(c) (1)
					All waste shipments inspected and sampled.	(c) (2)
					Waste analysis plan on-site.	(c) (3)
	✓				24 hr. surveillance at active portion.	(d) (2) (i)
	✓				Artificial barrier at active portion.	(d) (2) (i)
	✓				Proper signs posted and legible at a distance of at least 25 ft.	(d) (3)
					Inspection schedule on-site. <i>In Part B.</i>	(e) (2)
					Maintenance schedule on-site for equipment or structures which reveal deterioration or malfunction.	(e) (4)
				✓	Immediate remedial action taken where a hazard is imminent or has already occurred.	(e) (4)
	✓				On the job or classroom personnel training program.	(f)
	✓				Records retained for each employee at facility of training, job title, and job description.	(f) (6), (i)
	✓				Ignitable or reactive wastes separated from source of ignition or reaction.	(g) (1)
	✓				No smoking signs displayed where there are hazards from ignitable or reactive wastes.	(g) (1)
	✓				Treatment, storage, disposal of ignitable or reactive wastes or mixing of incompatible wastes or materials conducted according to requirements.	(g) (2)
	✓				Facility equipped with internal alarm system capable of providing immediate emergency instruction to personnel.	(h) (2) (i)
	✓				Facility equipped with a device for summoning outside emergency assistance.	(h) (2) (i)
	✓				Facility equipped with fire control, spill control, and decontamination equipment.	(h) (2) (i)
	✓				Facility equipped with water at adequate volume and pressure to supply fire control equipment.	(h) (2) (i)
	✓				Facility communications or alarm systems, fire control, spill control, and decontamination equipment tested and maintained.	(h) (3)
		✓			Adequate aisle space maintained to allow unobstructed movement of personnel and equipment during emergencies.	(h) (6)
	✓				Contingency plan on-site and implemented.	(i) (1)
				✓	Contingency plan describes action taken by personnel in the event of an emergency.	(i) (3)
				✓	Contingency plan describes arrangements agreed to for outside emergency services such as police and fire department, hospitals, contractors, etc.	(i) (5)

1- NON-COMPLIANCE, 2- COMPLIANCE, 3- NOT APPLICABLE, 4- NOT DETERMINED

COMPLIANCE STATUS				REQUIREMENT	CHAPTER CITATION
1	2	3	4		
				<i>Needs to be updated</i>	75.265
X				Contingency plan contains an up-to-date list of names, addresses and phone numbers of all persons qualified to act as emergency coordinator.	(i) (6)
			✓	Contingency plan contains list of emergency equipment including location, physical description and capabilities of each item	(i) (7)
			✓	Contingency plan contains an evacuation plan if there is a possibility that evacuation could be necessary	(i) (8)
	✓			One employee designated as the primary emergency coordinator either on the premises or on call.	(i) (11)
X				Facility accepting only PA manifests	(j)
	✓			Manifests properly completed and routed within time limits (24 hrs.)	(j) (2) (3)
	✓			Manifest discrepancies resolved or reported within time limits	(j) (9) (10)
	✓			Written operating record maintained on the premises	(k)
✓				Written operating record contains description and quantity of wastes and method of treatment, storage or disposal	(k) (2) (i)
✓				Written operating record contains location and quantity of each hazardous waste	(k) (2) (ii)
✓				Written operating record contains results of waste analyses and treatability tests	(k) (2) (iii)
	✓			Written operating record contains reports and details of all incidents	(k) (2) (iv)
✓				Written operating record contains records and results of all inspections	(k) (2) (v)
✓				Written operating record contains required monitoring, testing, and analytical data	(k) (2) (vi)
			✓	Written operating record contains closure and post-closure cost estimates	(k) (2) (vii)
	✓			All records retained on premises and available for inspection	(l)
	✓			Quarterly reports submitted to the Department <i>if quarterly not required, but annual is required, was not still need annual</i>	(m)
				Emissions, discharges, fires, explosions, and groundwater contamination reported as required	(m) (2)
		✓		Groundwater monitoring wells located at approved sites	(n) (2)
		✓		Adequate protection of groundwater monitoring wells	(n) (6)
		✓		Groundwater sampling and analysis plan on the premises	(n) (7)
		✓		Groundwater quality assessment and abatement outline on the premises	(n) (13)
✓	✓			Closure plan on the premises and up-to-date <i>No 1986 update</i>	(o) (2) - (9)
		✓		Post-closure plan on the premises and up-to-date	(o) (10) - (19)
✓				Annual closure cost estimate on the premises and up-to-date <i>No 1986 update</i>	(p) (2) - (4)
				Annual post-closure cost estimate on the premises and up-to-date	(p) (5) - (7)

1 - NON-COMPLIANCE, 2 - COMPLIANCE, 3 - NOT APPLICABLE, 4 - NOT DETERMINED					NEED
COMPLIANCE STATUS				REQUIREMENT	CHAPTER CITATION
1	2	3	4		
		✓		Containers managed to prevent leaks and spills	(q) (1)
		✓		Containers are compatible with waste stored.	(q) (2)
		✓		Containers are closed during storage	(q) (3)
		✓		Container storage area inspected weekly for leaks, deterioration, etc.	(q) (5)
				Containers holding ignitable or reactive wastes are set back 15 m (50 ft) from property line.	(q) (6)
	✓			Satisfactory procedures followed for handling incompatible wastes.	(q) (7)
	✓			Incompatible wastes separated or protected from other materials.	(q) (9)
✓				Containers and tanks labeled to identify accurately hazardous waste contained.	Act 97 Section 403(b)
	✓			Precautions taken for tanks holding ignitable, reactive, or incompatible waste or material	(r) (2)
	✓			Tanks managed to prevent leaks, rupture, corrosion, or otherwise failing.	(r) (3)
		✓		Uncovered tanks operated to ensure at least 60 cm (2 ft) of freeboard.	(r) (4)
		✓		Uncovered tanks equipped with an overflow alarm and an overflow device to a standby tank with a capacity equal to or exceeding the freeboard requirement	(r) (4)
	✓			Continuously fed tanks equipped with a means to stop the inflow.	(r) (5)
		✓		Containment structure with a capacity that equals or exceeds the largest above ground tank volume plus a reasonable allowance for precipitation based on local weather conditions and plant operations provided for liquid storage in above ground or partially above ground tanks.	(r) (6)
		✓		Waste analyses and/or trial tests conducted on hazardous wastes substantially different from wastes previously treated or stored; or chemically treat hazardous waste with a substantially different process than any previously used in that tank.	(r) (7)
✓				Discharge control equipment inspected once each operating day.	(r) (8)
✓				Monitoring equipment data inspected once each operating day.	(r) (8)
✓				Liquid level of tanks inspected once each operating day.	(r) (8)
✓				Construction materials of tanks inspected weekly. <i>Not documented</i>	(r) (8)
✓				Construction materials of discharge confinement structures and area immediately surrounding inspected weekly. <i>not Documented</i>	(r) (8)
		✓		All hazardous waste removed from tanks and related appurtenances at closure.	(r) (9)
				Placement of ignitable or reactive waste only with the Department's approval	(r) (10)
		✓		Covered tanks in which ignitable or reactive waste is treated or stored meets NEPA buffer zone requirements.	(r) (11)
	✓			Precautions taken for handling ignitable, reactive or incompatible waste or material.	(r) (12)

*No Containers  
in Storage*

*Does not appear to be impervious*

## 75.265

[illegible]

[illegible]

HAZARDOUS WASTE INSPECTION REPORT  
Part C - Comments

of Inspection October 15, 1987 Identification Number PAD 980530594  
ny, Installation Name Sun Refining + marketing Co.  
y. Delaware Municipality Marcus Hook Boro

During this TSD inspection the following observations were made:

1. No 1986 Annual TSD report has been submitted.
2. No 1986 Annual Closure cost update has been submitted.
3. TSD Facility accepted out-of-state manifest (VAD 0718595).
4. There are several deficiencies in the Daily Operating Log.
5. (Daily, weekly) Periodic Construction and maintenance inspection logs not properly documented.
6. Tanks involved with and used for storage of Haz. waste (in the Solid waste Facility) need to be labelled, and secondary containment is questionable ~~in the~~ around the storage tanks.

Inspection report is official notification that a representative of the Department of Environmental Resources, Bureau of Solid Waste Management, inspected the above installation. Findings of this inspection are shown in this report. Any violations which were uncovered by the inspection are indicated. Violations may also be discovered upon examination of results of laboratory analyses and review of Department records. Notification will be coming, confirming any violations indicated herein and listing any additional violations.

Interviewed (signature)

Paul E. Dore

Date

10/15/87

Director (signature)

John R. Boyle

Date

10/15/87